DOCUMENT RESUME

ED 355 372 CE 063 197

TITLE	Commercial Drivers License Workplace Literacy Project. Computer Training.
INSTITUTION	Minnesota Teamsters Service Bureau, Minneapolis.; Northeast Metro Technical Coll., Minneapolis.
SPONS AGENCY	Office of Vocational and Adult Education (ED), Washington, DC. National Workplace Literacy Program.
PUB DATE	92
CONTRACT	V198A210243
NOTE	198p.; For related documents, see CE 063 194-196.
PUB TYPE	Guides - Classroom Use - Teaching Guides (For Teacher) (052)
EDRS PRICE	MF01/PC08 Plus Postage.
DESCRIPTORS	Adult Basic Education; Adult Literacy; Basic Skills; Calculators; Competence; Competency Based Education; *Computer Literacy; *Database Management Systems; Educational Resources; Learning Modules; Licensing Examinations (Professions); *Literacy Education; Mathematics Instruction; On the Job Training; Skill Development; Spreadsheets; Teaching Methods; Two Year Colleges; *Word Processing
IDENTIFIERS	Commercial Drivers License; *Truck Drivers; *Workplace Literacy

ABSTRACT

These course outlines and instructor's guides were developed for a workplace literacy project conducted cooperatively through the Minnesota Teamsters Service Bureau and Northeast Metro Technical College. They are part of the job-specific curriculum for commercial truck drivers developed during the project. The beginning computer course introduces IBM computers and familiarizes students with the Disk Operating System (DOS), then presents an overview of computer applications in word processing, electronic spreadsheets, and database management. The second computer course is designed to continue computer exploration in greater depth; it is meant to familiarize students with the top 20 DOS commands. The word processing course is a three-session workshop that teaches students to use the PC-TYPE program. Another three-session course teaches the use of PC-CALC electronic spreadsheets. The last course, calculator math, is correlated with a required textbook ("Math Skills that Work"). Topics covered the following: decimals, fractions, percentages, interest rates, estimating, English and metric measurements, and analyzing data using charts and graphs. Each course guide contains some or all of the following: performance objectives, text references, suggested handouts, length of time, topic outline with tips and hints, pre/posttests, and worksheets. Course evaluation forms also are included in each packet. (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED355372

Commercial Drivers License
Workplace Literacy Project

Computer Training

Minnesota Teamsters Service Bureau

Northeast Metro Technical College

1992

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

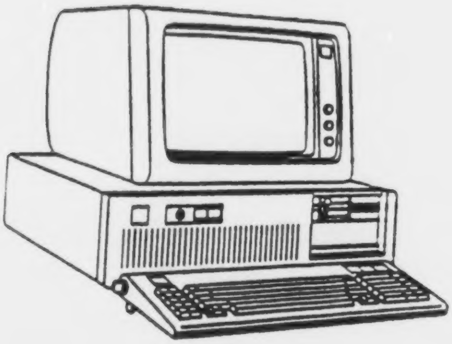
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

CE 063 197

BEST COPY AVAILABLE

WORKPLACE LITERACY PROJECT

COMPUTER TRAINING



WORKPLACE LITERACY RESOURCE CENTER
1-800-832-4916

MINNESOTA TEAMSTERS SERVICE BUREAU
NORTHEAST METRO TECHNICAL COLLEGE

Introduction to Computers

WORKPLACE LITERACY PROJECT

COMMERCIAL DRIVERS LICENSE

JEAN C. DUNN
Executive Director
Minnesota Teamsters Service Bureau

DR. PAUL BORANIAN
Project Director
Minnesota Teamsters Service Bureau

DR. BILL WARNER
President
Northeast Metro Technical College

JON A. HARBACK
Project Coordinator
Northeast Metro Technical College

Special thanks to Harold Yates, President of the Minnesota Teamsters Joint Council #32 for facilitating the involvement of a number of trucking companies in the Minnesota Teamsters Service Bureau Workplace Literacy Project

1992

INTRODUCTION TO COMPUTERS

Course Description

This course is designed for the individual who needs an introductory course in computer operations. The series of sessions will introduce the IBM and compatible computers by exploring the hardware and software of the computer and how they work together.

It is designed to familiarize the student with the hardware components of a Personal Computer. DOS (Disk Operating System) is explored as well as the directory and file structure used by DOS.

Following the introduction to computers, the three most common computer applications used in business and home computing are studied. Word Processing, Electronic Spreadsheets and Database Management will be introduced.

The word processing segment of the course allows students to practice many of the features of modern word processing, including copy, move, character enhancements and saving a file.

The electronic spreadsheet segment provides practice in creating a home budget using the PC-CALC program.

The database management segment provides practice in accessing a data base, creating the format for and entering data into a data base.

INTRODUCTION TO COMPUTERS

Performance Objectives

Upon completion of this course, the student will be able to:

Identify and describe the major PC components.

> Performance will be satisfactory if the student will define the major components of a PC completing 7 of 8 descriptions.

List the disk and diskette types and capacities.

> Performance will be satisfactory if the student can describe diskette capacities according to diskette size.

Describe proper diskette handling techniques and proceedures.

> Performance will be satisfactory if the student can explain at least five cautions with respect to handling diskettes.

Describe the basic software catagories used with the IBM and compatible computers.

> Performance will be satisfactory if the student can list the three basic software catagories.

Describe the Disk Operating System and its function.

> Performance will be satisfactory if the student can describe the four basic functions of the Disk Operating System.

Draw and explain the directory / file structure used with an IBM or compatible computer.

> Performance will be satisfactory if the student can draw the directory structure used with the Disk Operating System.

Enter basic DOS commands using an IBM or compatible computer.

> Performance will be satisfactory if the student can appropriately use the following basic DOS commands:
> TIME, DATE, DIR, CD, CHKDSK, FORMAT

Upon completion of this course, the student will be able to:

Access and start the PCTYPE Word Processing program.

Performance will be satisfactory if the student can make appropriate entries on the keyboard to access and start the PCWP program.

Retrieve a file stored on a diskette using the GET command.

Performance will be satisfactory if the student can make retrieve a file stored on the Student Data Diskette.

Define text entry and cursor movement keys used in the PCTYPE program.

Performance will be satisfactory if the student can enter data and demonstrate use of the cursor movement keys.

Define the Function Keys displayed on the Message Line of the PCTYPR screen.

Performance will be satisfactory if the student can enter data and demonstrate use of the cursor movement keys.

Define the purpose and use of the PCTYPE Column Ruler

Performance will be satisfactory if the student can change Margins, Tabs & Indent symbols.

Save PCTYPE file to the student data diskette.

Performance will be satisfactory if the student can save a file to the student data diskette.

Upon completion of this course, the student will be able to:

Access and start PC-CALC, the Spread Sheet program.

> Performance will be satisfactory if the student can make appropriate entries on the keyboard to access and start the PC-CALC program.

Load spreadsheet data using a student data diskette.

> Performance will be satisfactory if the student can retrieve spreadsheet data from student data diskette.

Enter data, text and formulas into cells to accomplish a simple spreadsheet application.

> Performance will be satisfactory if the student can enter spreadsheet data for home finances into the PC-CALC program.

Save spreadsheet data using a student data diskette.

> Performance will be satisfactory if the student can save the spreadsheet data for home finances onto a student data diskette.

Upon completion of this course, the student will be able to:

Access and start PC-FILE, the Data Base program.

> Performance will be satisfactory if the student can make appropriate entries on the keyboard to access and start the PC-FILE program.

Load database data using a student data diskette and define the data base components.

> Performance will be satisfactory if the student can retrieve data base data from a student data diskette.

Enter data, and create a simple data base file.

> Performance will be satisfactory if the student can create a data base format and enter data for the data base using thje PC-FILE program.

Save data base data using a student data diskette.

> Performance will be satisfactory if the student can save the data base data onto a student data diskette.

INTRODUCTION TO COMPUTERS

Instructor Guide

This document is a Guide to be used by the instructor in teaching the INTRODUCTION TO COMPUTERS Course. It also provides a means for updating the course. The TIPS & HINTS column in the outline segment of each section contains space for adding comments each time the course is run. This provides a way to pass on ideas and insight to other instructors that may teach the course.

The Instructor Guide is structured in sequence with the objectives. It is organized into twenty-one (21) sections, each covering one objective.

The reference text for the course, Application Software for the IBM PC. Supplemental handouts are included to provide information and skill practice for the different features introduced.

The OUTLINE portion of the Instructor Guide provides direction and timing for each session.

The instructor should facilitate the sequence and timing of the session and serve as an advisor should there be any questions.

Each section is divided into the following segments.

OBJECTIVE: Performance objective listed.

REFERENCE: Application Software for the IBM PC.

HANDOUT: Handout(s) to be used in each lesson.

TIMING: The approximate time required to accomplish the objective. These times will vary, a range of time for each objective is indicated. The times that are indicated reflect the time allocated for the particular lesson. Extra time should be allowed for hands-on practice.

OUTLINE: Provides the direction and timing for each objective. The outline sheet is in a split-sheet format, with the TOPICS listed in the left column and the TIPS & HINTS in the right column. These TIPS & HINTS are comments relative to this lesson that may be helpful to you the instructor. This portion of the guide should be updated each time the session is run. These notes are a great help to the instructor and will assist in making the guide most useful.

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Introductions: Self, Students, Course and Text

HANDOUT:
Registration forms
Course Syllabus
Pre / Post Quiz

TIMING: 30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Registration:	
Distribute registration forms as required.	
Introductions:	
Introduce yourself and have students introduce themselves	Give them some guidance to help them - such as: Name Place of work Computer background Why they are taking Intro to Computers
Introduce course:	
Distribute the course syllabus, review each sessions content.	Ask for questions and concerns about the course or schedule.
Place the responsibility to learn on the students	Review the comments at the bottom of the syllabus.
Distribute the pre-course quiz - explain that the same quiz will be given at the end of the course.	
Show or distribute the book that will be used - reviw it briefly chapter by chapter.	

REGISTRATION FORM
SKILL ENHANCEMENT TRAINING PROGRAM

Northeast Metro Technical College
in cooperation with
Minnesota Teamsters Service Bureau

Course: ______________________________

1. Start Date _______________ 2. End Date _______________

3. Location: Northeast Metro Technical College _______________
Other ____

4. Name ____
Last First Middle Initial

5. Address ____

____
City State Zip

6. Telephone: Home (   ) __________ Work (   ) __________

7. Employer ______________________________ Member of Teamster Local # _______

8. Current Job Title ____

9. Sex ___Male ___Female

10. Age category:
___ 20-25
___ 26-30
___ 31-35
___ 36-45
___ 46+

11. Ethnic Origin:
___ White ___ Native American
___ Black ___ Asian

12. What is your primary spoken language? ___ English ___ Spanish ___ Other

13. Do you have a high school diploma? ___Yes ___No GED? ___Yes ___No

14. Have you had any post high school training? ___Yes ___No
If yes, what type?

TYPE	DEGREE/MAJOR
___ Community College	______________________________
___ Technical College	______________________________
___ Four-Year College	______________________________
___ Military	______________________________
___ Other:	______________________________

15. How did you find out about the course? ______________________________

Northeast Metro Technical College complies with state and federal laws prohibiting discrimination against students because of age, race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance or disability.

INTRODUCTION TO COMPUTERS

Course Syllabus

Text: Application Software for the IBM PC
Dates: Xxxxx XX, XX, XX
Xxxxx XX, XX, XX

XX Xxxxx	Introduction to the computer - hardware and software
XX XXXXX	D O S - directories, files, and basic commands
XX Xxxxx	Word Processing - PC-Type+
XX Xxxxx	Electronic Spreadsheets - PC-Calc+
XX Xxxxx	Database Management - PC-File+
XX Xxxxx	Wrap up - Final Exam

SUGGESTIONS:

Take the responsibility to learn:

Ask questions - the only dumb question is the one that isn't asked.

Explore and fiddle - you can't hurt the computer, you can always "reboot".

Study the text, read the material and complete the lab exercises.

COMPUTER SKILLS SURVEY
INTRODUCTION TO COMPUTERS

Student Name ____

Introduction to Computers and DOS

1. D O S stands for D_____ O_______________ S__________.

2. Word processing, database management and spreadsheets are referred to as _________________ programs.
    - a. processing
    - b. command
    - c. application
    - d. relational

3. Which of the following is not one of the important parts of the computer system?

    a. memory b. CPU c. Floppy Disk d. Disk Drive(s)

4. The non-removable disk is called the __________ disk.

5. The removable disk is called the ______________ disk.

6. The blinking line or block on the screen where data is to be entered is called the cursor. Circle: True False

7. Data is organized on a disk in a structure of directories and _____________.

8. Two examples of input used with a computer are keyboard and _____________.

9. The A> or C> designation that is displayed on the screen is referred to as the system _____________.
    - a. cursor
    - b. header
    - c. pointer
    - d. prompt

10. To obtain a list of the files on a disk, use the command DIR.

Circle: True False

11. To prepare a diskette for use it must first be ________________.

   a. formatted
   b. initialized
   c. booted
   d. filed

12. Two sizes of diskettes most commonly used are 5 1/4" and 8 1/2".

Circle: True False

COMPUTER SKILLS SURVEY

Student Name ____

Introduction to Word Processing

1. A word processing program is used to create
   - a. letters
   - b. memos
   - c. documents
   - d. reports
   - e. all of the above

2. When creating a document, the data being entered is held in the computer ______________.

3. Aligning a paragraph of text on the right margin is referred to as right justification. Circle: True False

4. To save a document means to send the data to a ______________.

5. A typical sheet of 8 1/2" X 11" paper has room for 100 lines of text. Circle: True False

6. To look for a particular word within the text and to change it to another word is called _________ and replace.

COMPUTER SKILLS SURVEY

Student Name ____

Introduction to Electronic Spreadsheets

1. Using an electronic spreadsheet, data is formatted into rows and ________________.

2. The specific locations into which the numbers are entered are called bytes. Circle: True False

3. Lotus 1-2-3 is a popular spreadsheet program. Like a word processing program, it is referred to as an ________________ program.

4. When using a word processing or spreadsheet program, the program is loaded from disk into the computer's ________________.

5. The five (5) functions that can be performed on the data in a spreadsheet are:

   a. adding or sum
   b. averages
   c. maximum value
   d. minimum value
   e. net present value
   f. all of the above

6. All functions are performed in the computer memory, and must be saved on a disk for future use. Circle: True False

COMPUTER SKILLS SURVEY

Student Name ____

Introduction to Database Management

1. A database is a collection of ______________ data.

   a. recorded
   b. related
   c. complex
   d. formatted

2. A data item such as a NAME or PHONE NUMBER in a database is referred to as a field. Circle: True False

3. Two or more of these related data items, for example a NAME, ADDRESS, and PHONE NUMBER together are called a r______________.

4. An ALPHANUMERIC field can have letters and numbers but a NUMERIC field must have all except:

   a. asterisks
   b. numbers
   c. decimal points
   d. minus signs

5. When naming fields, the tab key should be used rather than spaces. Circle: True False

6. Retrieving data from a Database to a Spreadsheet is referred to as importing data. Circle: True False

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Identify and describe the major PC components.

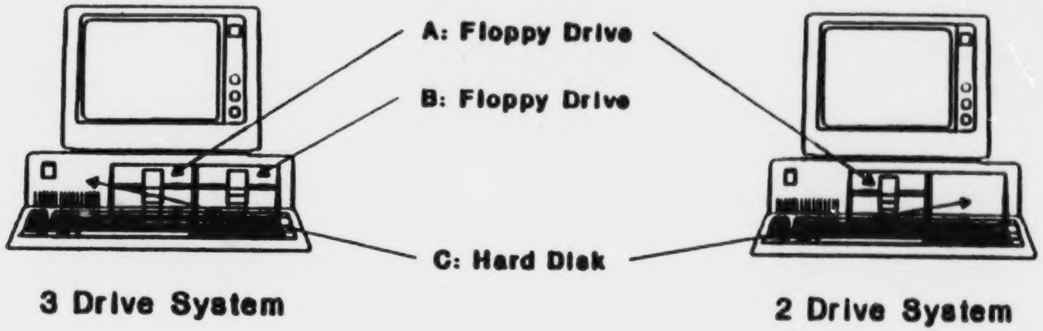
HANDOUT: 3 Drive System / 2 Drive System
MEMORY / STORAGE

Also: PC Motherboard, 5 1/4 drive, 3 1/2 drive, Hard Disk Drive

TIMING: 1 hour

OUTLINE:

TOPIC	TIPS & HINTS
Describe the typical systems & point out the 2 drive vs. 3 drive system	Overhead 1
Ask students to identify which system they have in front of them	
Describe the motherboard components - pass around room	
Point out the drive designations A: B: C: etc.	
Describe the drives, pass them around the room	
Hard Drive - take top off & pass around	
Describe the types of monitors found on systems - mono, CGA, EGA, & VGA	
Describe the two types of keyboards found. One type is on the lab system, the other is in the book - page 6	
Describe MEMORY & STORAGE & discuss the differences	Overhead 2


A: Floppy Drive
B: Floppy Drive
C: Hard Disk
3 Drive System
2 Drive System

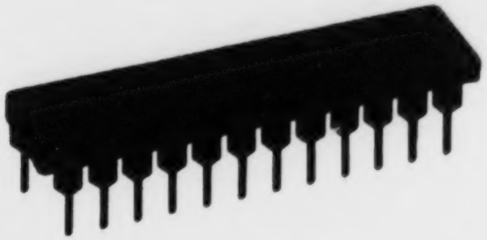
	A:	B:	C:
2 Drive System	5 1/4"	5 1/4"	
	5 1/4"	3 1/2"	
(typical)	5 1/4"		Hard Disk
	3 1/2"		Hard Disk
3 Drive System	5 1/4"	5 1/4"	Hard Disk
	5 1/4"	3 1/2"	Hard Disk
	3 1/2"	3 1/2"	Hard Disk

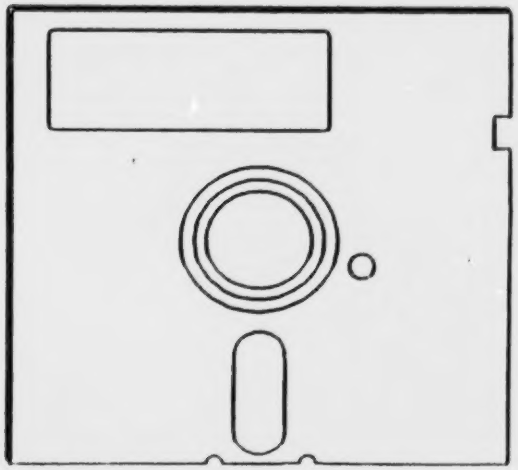
Diskette Capacities

5 1/4"	
SS	180 Kb
DS	360 Kb
HC	1.2 Mb
3 1/2"	
DS	720 Kb
HC	1.44 Mb

MEMORY

(RAM)





STORAGE

(Disk / Diskette)

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: List the disk and diskette types and capacities.

HANDOUT: 3 Drive System / 2 Drive System
Hard Drive - floppy diskettes 5 1/4" & 3 1/2"

TIMING: 20 - 30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Describe the diskette sizes and capacities	Overhead 1
Pass around the diskette samples - the ones that are opened up for demo purposes	
Point out the components - what its made of (plastic) with metal oxide coating, write protect, index mark,	
Describe the problem they will have in formatting a diskette, specifically that they will format a regular density diskette on a high capacity drive	
Discuss the hard drive & its' capacity - point out that the lab system is a 20 Meg drive - describe the typical drive size 100 Meg & up to 600 - 800 Meg for a "file server" on a network.	

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Describe proper diskette handling techniques and

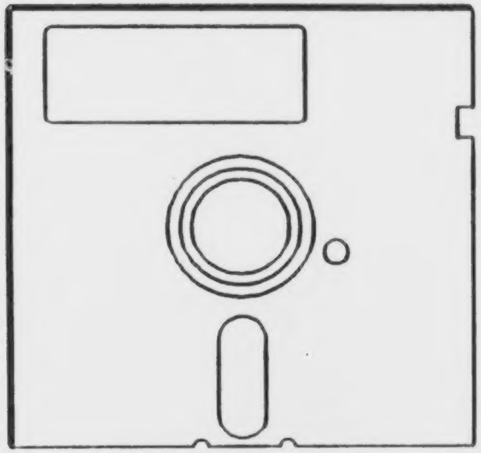
HANDOUT: Diskettes - HANDLE WITH CARE
TRACK - CYLINDER - SECTOR
demo floppies

TIMING: 20 minutes

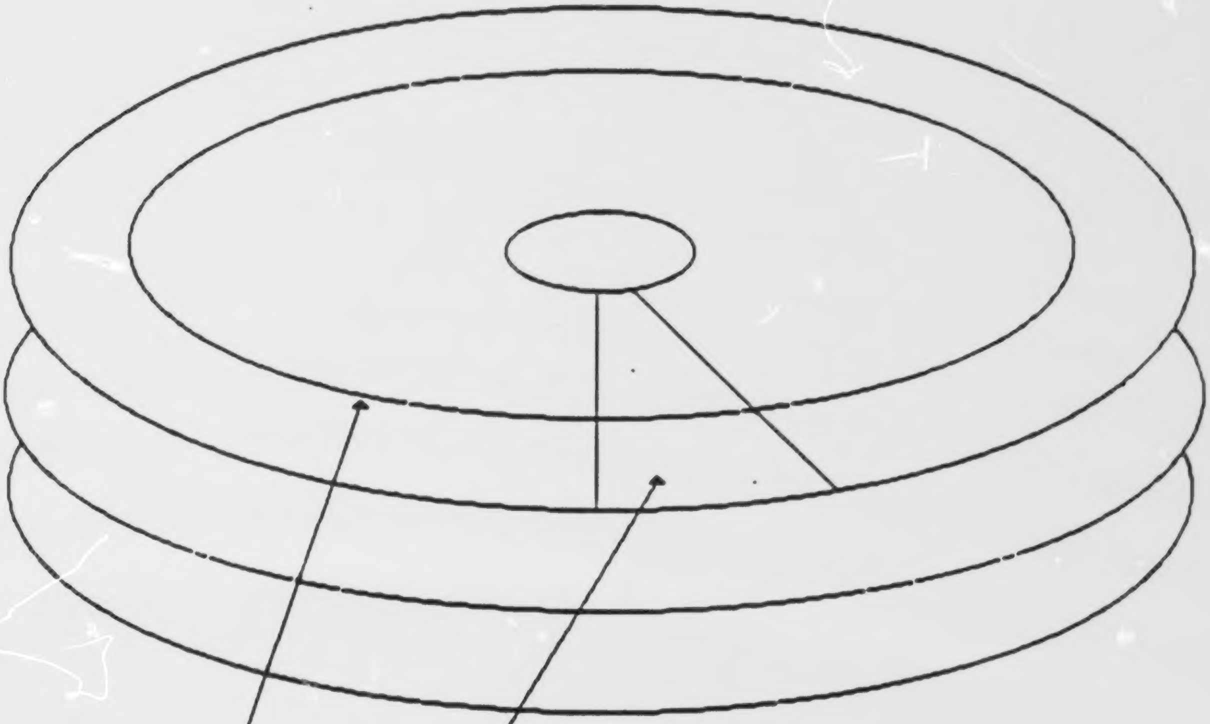
OUTLINE:

TOPIC	TIPS & HINTS
Discuss topics on the H.O.	
Store in envelope	
Use labels	
Do not touch media	
Do not bend	
Do not overheat	
Caution - magnetism	
TRACK - CYLINDER - SECTOR	
Describe how data is stored on a disk or diskette - be sure to define that the recording concept applies to both hard disk and floppies	
Discuss briefly the way the floppies work - like a tape player the heads actually touch the surface - whereas the hard disk heads "fly" over the recording surface.	

Diskettes - HANDLE WITH CARE



- o Store in envelope
- o Use labels
- o Do not touch media
- o Do not bend
- o Do not overheat
- o Caution - magnetism



TRACK - a line of magnetic flux changes

CYLINDER - tracks on all surfaces

SECTOR - portion of a track, 512 bytes of data

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Describe the basic software catagories used with IBM and compatible computers.

HANDOUT: Software Categories
Also: motherboard

TIMING: 15 - 20 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Firmware - point to a ROM chip on the motherboard	
Operating System - DOS point out that the DOS comes on a disk and it is an Operating System	
Application Software - discuss the applications that will be used in the course PCTYPE, PCCALC, & PCFILE	

Software Categories

Firmware - ROM BIOS

Operating System - DOS

Application - dBASE III Plus

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Describe the Disk Operating System and its function.

HANDOUT: DOS loads from disk - Memory Map

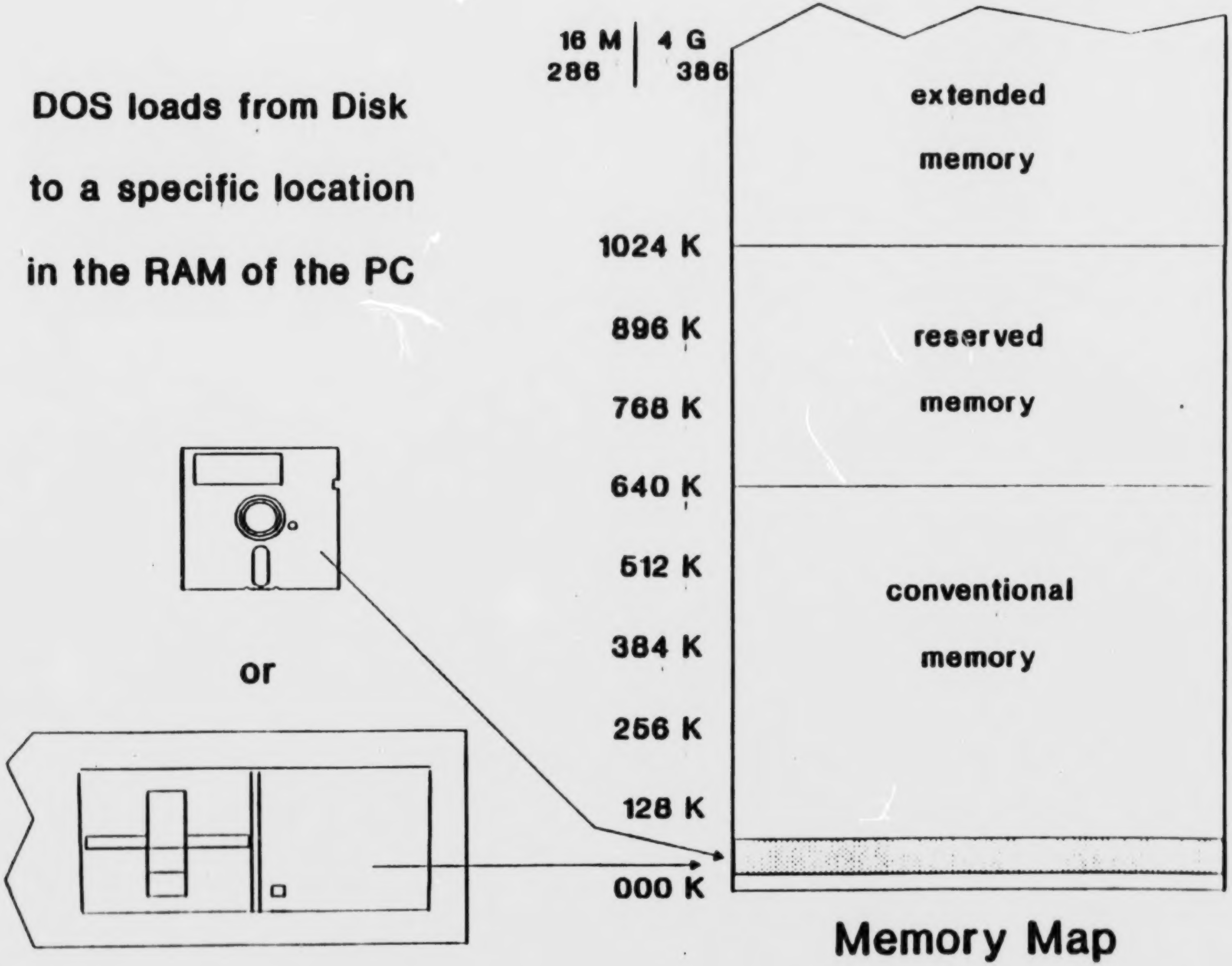
TIMING: 20 - 30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Describe how DOS is purchased on disk - describe the Rev. levels 3.2, 3.3, 4.01, 5.0	
Refer to the handout, show how DOS loads into memory	
Point out hoe it loads from either diskette or hard disk	
At this point - if they have not done so yet, have the students power up the system	
Point out what happens during power up - the memory count up - the beep - some systems probably have a virus checker	
Walk them through the screen of the DOS SHELL. Describe each section - have them access the "Change Colors" screen. Then have them go to the DOS command prompt.	
Step them through DIR command using /P and /W	
Describe - directory & file structure. Draw a simple directory tree - include the root directory and DOS directory and the directories for the three applications.	

- - - - - - - This should be the end of session 1 - - - - - - -

DOS loads from Disk to a specific location in the RAM of the PC


16 M
286
4 G
386
extended memory
1024 K
896 K
reserved memory
768 K
640 K
512 K
conventional memory
384 K
or
256 K
128 K
000 K

Memory Map

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Draw and explain the directory / file structure used with an IBM or compatible computer.

HANDOUT: DOS loads from disk - Memory Map
Directory structure
Files that will "run"
INTRODUCTION TO DISK OPERATING SYSTEM (Worksheet)

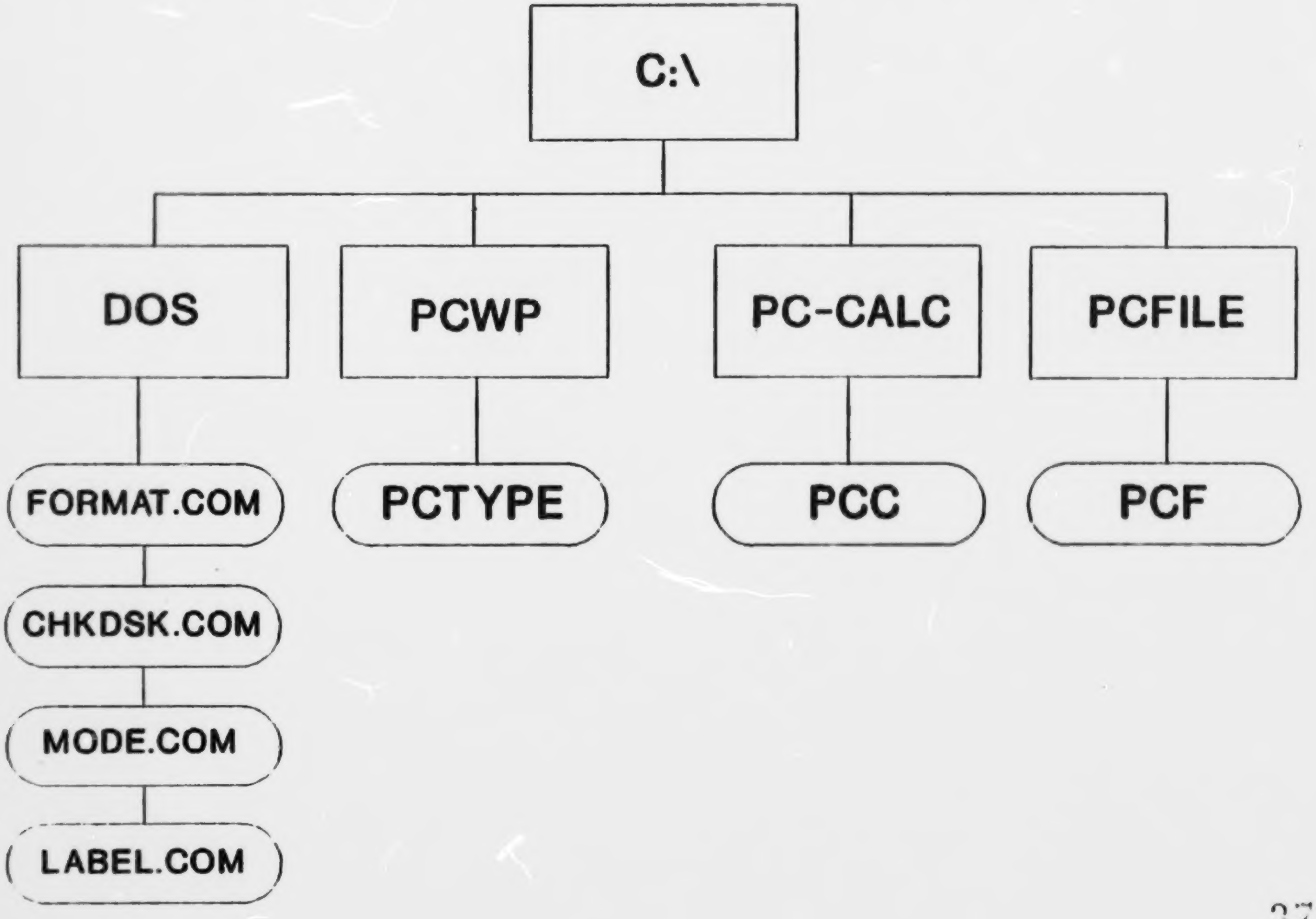
TIMING: Review 30 - 45 minutes
Directory & File structure 30 - 45 minutes

OUTLINE:

Each session should begin with a review of the last week.

Keep in mind that some of these (most) students have never before used a computer so their keyboard skills will be very shaky at best. Practice patients with these students.

TOPIC	TIPS & HINTS
Have students power up the systems. Review what happens during a power up - refer to the overhead "DOS loads from disk - Memory Map"	Have the students practice getting in and out of the DOS SHELL. Have them get in and out of the shell a few times.
Describe - directory & file structure. Draw a simple directory tree - include the root directory and DOS directory and the directories for the three applications.	Use the Directory Structure handout / overhead
Review the DIR command - Introduce the CD command -	
Discuss the Files that will "run" handout. Have the students review different directories to look for the files that will run.	
INTRO TO DISK OPERATING SYSTEM (Worksheet)	Now that they have started th system a couple of times, thi worksheet will mean more.



C:\

DOS

PCWP

PC-CALC

PCFILE

FORMAT.COM

CHKDSK.COM

MODE.COM

LABEL.COM

PCTYPE

PCC

PCF

Files that will "run"

.BAT	Batch File
.COM	Command File
.EXE	Executable File

INTRODUCTION TO DISK OPERATING SYSTEM

DOS is an acronym for D_____ O____________ S_________. An operating system manages the _________________ of a computer system and provides a method for an _____________________ program to efficiently use the computer system.

DOS also provides a common ________ ________________ for application programs. It organizes the information into a useable framework of __________ and _______________________.

The operating system (DOS) controls _______ ____________ between the PC and the _______________, monitors the ______ and ______ and supervises ______________ utilization.

Application _____________ depend on DOS for _______________ and __________ of its information. All _____________ ___________ use an operating system, some of the common OS's you may have heard of are _____, __________ DOS and ________.

The IBM and compatible computers use ___-DOS or ___-DOS. The MS refers to Microsoft Corporation and is the most widely used DOS.

The PC-DOS is specific to the _____ PC's and is essentially the same as MS-DOS. All of the functions discussed in this course are with reference to both MS-DOS or PC-DOS.

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Enter basic DOS commands using an IBM or compatible computer.

HANDOUT: DOS Reference Handout

TIMING: 1 - 1.5 hours

OUTLINE:

TOPIC	TIPS & HINTS
Have students try the basic DOS commands: TIME DATE DIR, DIR/P, DIR/W CD CHKDSK	This is one of those times that you should give the students a little time to fiddle with the computer. Monitor the students and be prepared to answer any questions that may arise.

D O S COMMANDS

Commands are what you, the operator, enter to tell DOS what to do. Some commands are ____________ commands and are called so because they are loaded into and are stored in the computer's ________________.

The other commands are _____________ commands and reside on the DOS disk or diskette. External commands are only accessable when the DOS disk and directory is the _____________ drive and directory.

Some INTERNAL commands are:

DATE
DEL
RENAME
TIME
ERASE
VOL
DIR
MD
TYPE
COPY
RD
CLS
CD
PATH

Commands can only be entered when the system __________ is present. The EXTERNAL command files must either be in the ______________ directory or a _______ to the command files must be included. Commands must be entered with specific _____________ and ____________________ that are unique to specific commands.

DOS COMMAND REFERENCE

The following is a composite of the commands that will be used in the labs for this class. Brackets [ ] indicate optional items in the command.

BACKUP - External command

```
BACKUP Drive:[\path\filename.ext] Drive:[/s][/d][/m]
```

/s	also backs up subdirectory files.
/d	backs up files that have been modified on or after a specified date.
/m	backs up files that have been modified since the last backup.

examples:

BACKUP C:\ A:/S	Back up the entire hard disk.
BACKUP C:\ACCTG A:	Back up the files within \ACCTG.

CD (Change Directory) - Internal command

```
CD\Path\
```

examples:

CD\	Change current directory to root directory.
CD\ACCTG	Change current directory to \ACCTG.
CD	Display current directory.

CHKDSK - External command

```
CHKDSK [d:]
```

examples:

CHKDSK A:	Check the disk in drive A.
CHKDSK /f	Check the current disk and fix any lost clusters.

DOS COMMAND REFERENCE

COPY - Internal command

```
COPY [Drive:][\Path\]filename.ext [Drive:][\Path\][file]
```

examples:

```
COPY A:AUTOEXEC.BAT C:
```

Copy the AUTOEXEC.BAT file from Drive A to Drive C.

```
COPY A:GAME-A C:\FUN\GAME-B
```

Copy GAME-A from drive A to directory FUN of Drive C and rename the file to GAME-B.

DEL (DELete) - Internal command

```
DEL [Drive:][\Path\]filename.ext
```

examples:

```
DEL A:\ACCTG\ACCTS.REC
```

Delete the file ACCTS.REC under the \ACCTG directory

```
DEL A:*.BAK
```

Delete all files in the A drive with an extension of BAK.

```
DEL A:*.*
```

Delete all files in the A Drive.

DIR (DIRectory) - Internal command

```
DIR [Drive:][\Path\][filename.ext][/p][/w]
```

examples:

`DIR` List a directory of the current directory on the current drive.

```
DIR C:\ACCTG/p
```

Display a listing of the ACCTG directory on drive C one page at a time.

D O S COMMAND REFERENCE

DISKCOPY - External command

```
DISKCOPY Drive: Drive:
```

examples:

```
DISKCOPY A: B:
```

Copy the entire contents of the diskette in drive A onto the diskette in drive B

```
DISKCOPY A: A:
```

Copy the entire contents of a diskette to another diskette using the A drive as the source and the destination.

FORMAT - External command

```
FORMAT Drive:[/s]
```

examples:

FORMAT A: Prepare the diskette in drive A as a data diskette.

FORMAT A:/s Prepare the diskette in drive A as a boot diskette.

MD (Make Directory) - Internal command

```
MD \Path\
```

examples:

MD MONEY Create a subdirectory called MONEY below the current directory

D O S COMMAND REFERENCE

PATH - Internal command

PATH [Drive:][\Path\][;\Path\]

examples:

PATH C:\;\DOS

Set the search path to include the root directory and the DOS subdirectory.

PATH Shows the current path.

PROMPT - Internal command

PROMPT [$X] (Where X is equal to item in table A)

d = current date
t = current time
v = DOS version
g = >
b = |
h = backspace
- = carriage return and line feed

p = current directory
$ = $
n = default drive
l = <
q = =
e = escape character

examples:

PROMPT Hello !!! Replace prompt with text "Hello !!!"

PROMPT $p Replace prompt with current directory.

RD (Remove Directory) - Internal command

RD \Path\

example:

RD \ACCTG\MONEY NOTE: Directory must be empty.

Remove the directory called MONEY under the \ACCTG directory.

DOS COMMAND REFERENCE

RENAME - Internal command

```
RENAME [Drive:][\Path\]filename.ext newname.ext
```

example:

```
RENAME C:\MONEY DOLLARS
```

Rename the file MONEY on drive C to DOLLARS.

RESTORE - External command

```
RESTORE Drive:[\Path\filename.ext] Drive:[/s][/p]
```

examples:

```
RESTORE A: C:\/s
```

Restore backed up diskettes to drive C including all subdirectories.

```
RESTORE A: C:\ACCTG
```

Restore files to \ACCTG on the C drive.

TYPE - Internal command

```
TYPE [Drive:][\Path\]filename.ext
```

example:

```
TYPE autoexec.bat
```

Display the contents of the ASCII file AUTOEXEC.BAT.

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Format a diskette using an IBM or compatible computer.

HANDOUT: FORMATTING DISKETTES

TIMING: 30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Distribute the worksheet and complete it as a group.	
Point out that the two tables on the worksheet refer to the two different sizes of diskettes.	
Distribute the floppy diskettes - ask the students if anyone remembers the problem we need to pay attention to.	The "problem" refered to is that we have a high capacity disk drive and a regular capacity diskette.
Discuss the ways that the FORMAT command can be used.	You may want to refer back to the first handout - 2 or 3 drive systems - the sizes & capacities are listed there.

- - - - - - - This should be the end of session 2 - - - - - - -

FORMATTING DISKETTES

New diskettes must be ____________ before they can be used to store ____________ or ________.

Formatting ________ all data on a diskette (if there is any) and appropriately prepares the ________ and ________ to accept ________.

It ________ the diskette for any ____ spots, builds the F____ A________ T_____ (FAT) and builds a ________ directory.

Formatting is done with the ________ command and one or more of the following ____________.

FORMAT COMMANDS - 3 1/2" DISKETTES

Type of drive / Type of diskette →	DS,DD	High Density
Regular		
High Capacity		

FORMAT COMMANDS - 5 1/4" DISKETTES

Type of drive / Type of diskette →	DS,DD	High Density
Regular		
High Capacity		

/S This parameter formats the ______ or ________ and ______ the system files ______.COM, ______.COM and ______.COM to the diskette.

CAUTION
FORMATTING DESTROYS ANY PREVIOUSLY EXISTING DATA
ON THE DISKETTE !!!

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Access and start the PCTYPE Word Processing program.

HANDOUT: Memory Contents - Memory Map

TIMING: 20 - 30 minutes (includes review time)

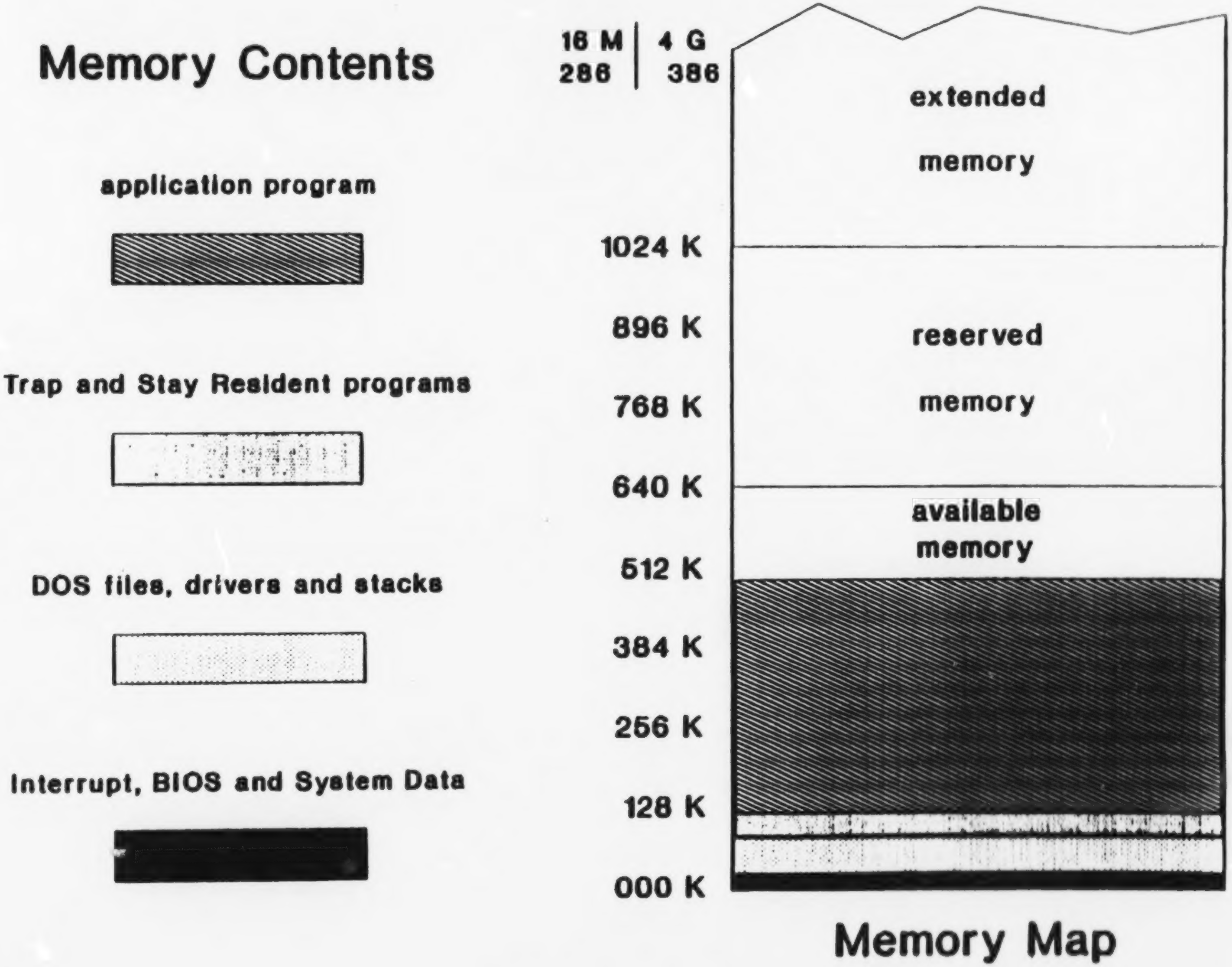
OUTLINE:

TOPIC	TIPS & HINTS

Each session should begin with a review of the last week.

Keep in mind that some of these (most) students have never before used a computer so their keyboard skills will be very shaky at best. Practice patients with these students.

TOPIC	TIPS & HINTS
The intention here is to use the CD command to access the PCTYPE program in the PCWP directory.	
The students should get into the program via the DOS command prompt. The DOS SHELL is easier but the best way to learn DOS is using the DOS commands.	
Refer to the Memory Map - point out how the application program loads into memory with DOS and the other items.	
Take just a few minutes to explain what the other memory contents consist of.	



Memory Contents

application program ▨

Trap and Stay Resident programs ░

DOS files, drivers and stacks ░

Interrupt, BIOS and System Data ■

16 M | 4 G
286 | 386
1024 K
896 K
768 K
640 K
512 K
384 K
256 K
128 K
000 K
extended memory
reserved memory
available memory

Memory Map

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Retrieve a file stored on a diskette using the GET command.

HANDOUT: Application Software for the IBM PC

TIMING: 15 - 20 minutes

OUTLINE:

TOPIC	TIPS & HINTS
You can either use the book or "walk" them through the process of retrieving a file from the student diskette.	
Introduce the GET command	
You need to explain the PCTYPE screen and all of the parts - they need to have the cursor on the "command line" to enter the GET command.	
Point out that if they do a GET command twice, they will load the file twice.	

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Define text entry and cursor movement keys used in the PCTYPE program.

HANDOUT: Application Software for the IBM PC

TIMING: 1 - 1.5 hours

OUTLINE:

TOPIC	TIPS & HINTS
Review the basic keyboard entry keys -	
Describe the main keyboard	Have the students enter some data - anything that put data in the screen.
Describe the numeric key pad	
Describe the cursor movement arrows	Then have them use the keys to get around on the screen.
Describe the keys:	
Insert Home Page Up Delete End Page Down	Be sure that the student trys all of the keys - perhaps list them on the board so that they can see them.

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Define the Function Keys displayed on the Message Line of the PCTYPE screen.

HANDOUT: Application Software for the IBM PC

TIMING: 15 - 20 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Describe the keys - one by one and have the students try them.	
There should be a discussion of the use of some of the keys that will be used the most.	

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Define the purpose and use of the PCTYPE Column Ruler.

HANDOUT: Application Software for the IBM PC

TIMING: 15 - 20 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Have students experiment with the ruler and tabs.	
Have them set new left and right margins	
Have them discover the difference between the tab and the indent tab.	

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Save PCTYPE file to the student data diskette.

HANDOUT: Application Software for the IBM PC

TIMING: 10 - 15 minutes

OUTLINE:

TOPIC	TIPS & HINTS
The function keys will help them discover the F9 FILE key -	They may need assistance with this since they will want to save it to a diskette. They of course need to specify the drive designator in the SAVE process
The save can be done with either F9 or SHIFT F9 have the students try both ways.	
Explain the concept - this file is only usable with the PCTYPE program.	
They can "look" at the file with DOS perhaps but they cannot do anything with it.	You WILL have students who come to class and try to "GET" the file without first starting the program.

- - - - - - - This should be the end of session 3 - - - - - - -

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Access and start PC-CALC, the Spread Sheet program.

HANDOUT:
Application Software for the IBM PC
Memory Contents - Memory Map
Directory Structure

TIMING: 20 - 30 minutes (includes review time)

OUTLINE:

TOPIC	TIPS & HINTS
Each session should begin with a review of the last week. Keep in mind that some of these (most) students have never before used a computer so their keyboard skills will be very shaky at best. Practice patients with these students.	
Take a few minutes to introduce the spreadsheet concept - many of the students will have no idea what a spreadsheet is.	Either use your own explanation or refer to the text. Pages 125 - 128
The intention here - again is to use the CD command to access the PCCALC program in the PC-CALC directory.	There will have to ba a review here. Even though the access is very similar to the PCTYPE program, the process should be reviewed to refresh their memory.
The students should get into the program via the DOS command prompt. The DOS SHELL is easier but the best way to learn DOS is using the DOS commands.	
Refer to the Memory Map - point out how the application program loads into memory with DOS and the other items.	

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Load spreadsheet data using a student data diskette.

HANDOUT: Application Software for the IBM PC
Memory Contents - Memory Map

TIMING: 20 - 30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Introduce the PCCALC screen	
Discuss the different pieces of the screen - rows / columns cells status line data entry area pointer edit line message line	
Have them load a spreadsheet from the student diskette	
Let them experiment with the spreadsheet.	
List items to try: moving pointer changing values review menus discuss HELP screens	Be sure to give them time guidance here. This is the first time they have dealt with a spreadsheet.

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE:	Enter data, text and formulas into cells to accomplish a simple spreadsheet application.
HANDOUT:	Jones Family Budget
TIMING:	1 - 1.5 hours

OUTLINE:

TOPIC	TIPS & HINTS
Now that they have seen a spreadsheet and tried a few things, have them build one.	
Have them build a budget sheet similar to the "Jones Family Budget"	Build this with them - describe each detail as you build each piece of the spreadsheet. This will get them familiar with the spreadsheet components

Wednesday May 20, 1992 21:56:18

Jones Family Budget - 1st Qtr. 1992

	Jan	Feb	Mar	TOTAL
Housing	600.00	600.00	600.00	1800.00
Car	289.00	289.00	289.00	867.00
N.S.P	66.00	69.00	58.00	193.00
Minnegasco	48.00	48.00	48.00	144.00
City Utilities			110.00	110.00
Sears	12.00	22.00	18.00	52.00
Visa	50.00	50.00	35.00	135.00
Insurance	150.00		110.00	260.00
Food	380.00	350.00	365.00	1095.00
TOTAL	1595.00	1428.00	1633.00	4656.00

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Save spreadsheet data using a student data diskette.

HANDOUT: Application Software for the IBM PC

TIMING: 10 - 15 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Point out that the save is different than the save in PCTYPE.	Explain the differences in various application programs.
	The students - once exposed to a "SAVE" such as in PCTYPE tend to try the same steps in saving a PCCALC file.
Select MENU to save the file.	
After saving - go to DOS to show them that the file was save with a .PCC as an extension for the file name.	

- - - - - - - This should be the end of session 4 - - - - - - -

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Access and start PC-FILE, the Data Base program.

HANDOUT: Application Software for the IBM PC
Memory Contents - Memory Map

TIMING: 20 - 30 minutes (includes review time)

OUTLINE:

<table>
<tr><th>TOPIC</th><th>TIPS & HINTS</th></tr>
<tr><td colspan="2">Each session should begin with a review of the last week.
Keep in mind that some of these (most) students have never before used a computer so their keyboard skills will be very shaky at best. Practice patients with these students.</td></tr>
<tr><td>Take a few minutes to introduce the database concept - many of the students will have no idea what a database is.
Explain: file
record
field</td><td>Either use your own explanation or refer to the text. Pages 238 - 241</td></tr>
<tr><td>The intention here - again is to use the CD command to access the PCFILE program in the PC-FILE directory.</td><td>There will have to ba a review here. Even though the access is very similar to the PCTYPE and PCCALC program, the process should be reviewec to refresh their memory.</td></tr>
<tr><td>The students should get into the program via the DOS command prompt. The DOS SHELL is easier but the best way to learn DOS is using the DOS commands.</td><td></td></tr>
<tr><td>Refer to the Memory Map - point out how the application program loads into memory with DOS and the other items.</td><td></td></tr>
</table>

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Load database data using a student data diskette and define the data base components.

HANDOUT: Application Software for the IBM PC

TIMING: 30 - 45 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Introduce the PCFILE screens	
Discuss the different pieces and components as you step thru the screens -	
Which drive for the database Selecting a database Menus: locating a record browse, etc.	You may (but probably not) run into an issue with CONFIG.SYS - se pg 244
Explain: file record field	
edit line message line	
Have them load a database from the student diskette	Use "CUSTOMER" database Note: F10 not <Enter>
Let them experiment with the database	
List items to try: finding a record next record previous record etc. discuss HELP "Alt/H"	Be sure to give them time guidance here. This is the first time they have dealt with a database. Be open to questions.

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Enter data, and create a simple data base file.

HANDOUT: Application Software for the IBM PC

TIMING: 45 - 60 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Now that they have seen a database and tried a few things, have them build one.	
Have them build a simple database using names that they are familiar with.	Build this with them - describe each detail as you build each piece of the database. This will get them familiar with the database components as it is built.
Have the students notice that the database record is saved automatically each time a record is saved.	

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: Save data base data using a student data diskette.

HANDOUT: Application Software for the IBM PC

TIMING: 5 - 10 minutes

OUTLINE:

TOPIC	TIPS & HINTS
This should be done as the students save each record in building a database.	
Remind them that the record was saved each time one was created.	Here again, the students need an explanation of the different types of applications and how the save is different for each.

- - - - - - - This should be the end of session 5 - - - - - - -

INTRODUCTION TO COMPUTERS

Instructor Guide

OBJECTIVE: N/A - LAST SESSION

HANDOUT:
Application Software for the IBM PC
Pre / Post Quiz
Evaluation Forms

TIMING: 3 - 4 hours (leave at least 45 minutes for the quiz and evaluation)

OUTLINE:

TOPIC	TIPS & HINTS

Each session should begin with a review of the last week.

Keep in mind that some of these (most) students have never before used a computer so their keyboard skills will be very shaky at best. Practice patients with these students.

The last session is an open lab. Point out to the students that they have the opportunity to spend the time where they want.

You will be available to answer questions as they need.

Leave about 45 - 60 minutes for the quiz and evaluation.

COMPUTER SKILLS SURVEY
INTRODUCTION TO COMPUTERS

Student Name ____

Introduction to Computers and DOS

1. D O S stands for D______ O________________ S___________.

2. Word processing, database management and spreadsheets are referred to as __________________ programs.
   a. processing
   b. command
   c. application
   d. relational

3. Which of the following is not one of the important parts of the computer system?

   a. memory b. CPU c. Floppy Disk d. Disk Drive(s)

4. The non-removable disk is called the ___________ disk.

5. The removable disk is called the _______________ disk.

6. The blinking line or block on the screen where data is to be entered is called the cursor. Circle: True False

7. Data is organized on a disk in a structure of directories and ______________.

8. Two examples of input used with a computer are keyboard and ______________.

9. The A> or C> designation that is displayed on the screen is referred to as the system _______________.
   a. cursor
   b. header
   c. pointer
   d. prompt

10. To obtain a list of the files on a disk, use the command DIR.

Circle: True False

11. To prepare a diskette for use it must first be __________________.

a. formatted
b. initialized
c. booted
d. filed

12. Two sizes of diskettes most commonly used are 5 1/4" and 8 1/2".

Circle: True False

COMPUTER SKILLS SURVEY

Student Name ____

Introduction to Word Processing

1. A word processing program is used to create

   a. letters
   b. memos
   c. documents
   d. reports
   e. all of the above

2. When creating a document, the data being entered is held in the computer _______________.

3. Aligning a paragraph of text on the right margin is referred to as right justification. Circle: True False

4. To save a document means to send the data to a ______________.

5. A typical sheet of 8 1/2" X 11" paper has room for 100 lines of text. Circle: True False

6. To look for a particular word within the text and to change it to another word is called __________ and replace.

COMPUTER SKILLS SURVEY

Student Name ____

Introduction to Electronic Spreadsheets

1. Using an electronic spreadsheet, data is formatted into rows and ________________.

2. The specific locations into which the numbers are ent[illegible]d are called bytes. Circle: True False

3. Lotus 1-2-3 is a popular spreadsheet program. Like a word processing program, it is referred to as an ________________ program.

4. When using a word processing or spreadsheet program, the program is loaded from disk into the computer's ________________.

5. The five (5) functions that can be performed on the data in a spreadsheet are:

   a. adding or sum
   b. averages
   c. maximum value
   d. minimum value
   e. net present value
   f. all of the above

6. All functions are performed in the computer memory, and must be saved on a disk for future use. Circle: True False

COURSE EVALUATION
SKILL ENHANCEMENT TRAINING PROGRAM

COURSE ______________________________ DATE COMPLETED ______

INSTRUCTOR: ____________________

DIRECTIONS; Circle the number on the right to indicate how satisfied you are with the following aspects of the course you just completed. (5 = very satisfied; 1 = not satisfied)

		Not Satisfied			Very Satisfied	
1.	Course Goals (specific, clearly communicated)	1	2	3	4	5
2.	Content, Subject Matter (organized, appropriate for course goals)	1	2	3	4	5
3.	Written Materials and Resources (up-to-date, easy to read, and/or follow)	1	2	3	4	5
4.	Support from instructor (quick, courteous, helpful)	1	2	3	4	5

What did you like about the course? ____________________________

____

What didn't you like about the course? ____________________________

____

What job related topics would you like addressed in future training sessions?

____

____ I would be interested in a follow-on group of computer classes.

____ A weekday evening would be most convenient. ____AM ____PM

____Mon ____Tues ____Wed ____Thurs ____Fri

____ Saturday morning classes would be most convenient.

Please jot down any other comments you may have below.

3/92

COMPUTER SKILLS SURVEY

Student Name ____

Introduction to Database Management

1. A database is a collection of __________________ data.

   a. recorded
   b. related
   c. complex
   d. formatted

2. A data item such as a NAME or PHONE NUMBER in a database is referred to as a field. Circle: True False

3. Two or more of these related data items, for example a NAME, ADDRESS, and PHONE NUMBER together are called a r________________.

4. An ALPHANUMERIC field can have letters and numbers but a NUMERIC field must have all except:

   a. asterisks
   b. numbers
   c. decimal points
   d. minus signs

5. When naming fields, the tab key should be used rather than spaces. Circle: True False

6. Retrieving data from a Database to a Spreadsheet is referred to as importing data. Circle: True False

COURSE EVALUATION
SKILL ENHANCEMENT TRAINING PROGRAM

COURSE ______________________________ DATE COMPLETED ______

INSTRUCTOR: ____________________

DIRECTIONS: Circle the number on the right to indicate how satisfied you are with the following aspects of the course you just completed. (5 = very satisfied; 1 = not satisfied)

	Not Satisfied			Very Satisfied	
1. Course Goals (specific, clearly communicated)	1	2	3	4	5
2. Content, Subject Matter (organized, appropriate for course goals)	1	2	3	4	5
3. Written Materials and Resources (up-to-date, easy to read, and/or follow)	1	2	3	4	5
4. Support from instructor (quick, courteous, helpful)	1	2	3	4	5

What did you like about the course? ____________________________

What didn't you like about the course? ____________________________

What job related topics would you like addressed in future training sessions?

____

___ I would be interested in a follow-on group of computer classes.

___ A weekday evening would be most convenient. ___AM ___PM

___Mon ___Tues ___Wed ___Thurs ___Fri

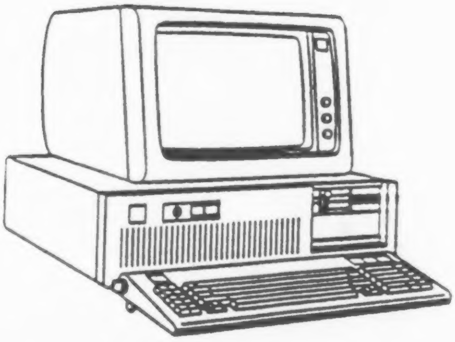
___ Saturday morning classes would be most convenient.

Please jot down any other comments you may have below.

3/92

WORKPLACE LITERACY PROJECT

COMPUTER TRAINING



WORKPLACE LITERACY RESOURCE CENTER
1-800-832-4916

MINNESOTA TEAMSTERS SERVICE BUREAU
NORTHEAST METRO TECHNICAL COLLEGE

Introduction to Computers II

WORKPLACE LITERACY PROJECT

COMMERCIAL DRIVERS LICENSE

JEAN C. DUNN
Executive Director
Minnesota Teamsters Service Bureau

DR. PAUL BORANIAN
Project Director
Minnesota Teamsters Service Bureau

DR. BILL WARNER
President
Northeast Metro Technical College

JON A. HARBACK
Project Coordinator
Northeast Metro Technical College

Special thanks to Harold Yates, President of the Minnesota Teamsters Joint Council #32 for facilitating the involvement of a number of trucking companies in the Minnesota Teamsters Service Bureau Workplace Literacy Project

1992

INTRODUCTION TO COMPUTERS II

Course Description

The INTRODUCTION TO COMPUTERS - 2 course is designed to continue the exploration of the computer to a greater depth. The student creates and organize directories and files, and learns the commands relating to directories and files.

In addition to directory commands, the top 20 DOS commands are learned and used.

The system startup is reviewed in detail and students learn how to read and customize the AUTOEXEC.BAT file.

Students learn how to use the line editor "EDLIN" to modify files. They will create and modify a batch file using EDLIN.

Students will describe the purpose of the CONFIG.SYS file and will modify it using EDLIN.

Students have the opportunity to continue with the PC-TYPE, PC-CALC, and PC-FILE applications. The class and lab time can be spent learning more about any of the applications or becoming more familiar with DOS.

INTRODUCTION TO COMPUTERS II

Performance Objectives

Upon completion of this course, the student will be able to:

Describe what steps are performed during a computer power-up sequence including Power On Self Test.

> Performance will be satisfactory if the student can complete the steps required on a start-up worksheet.

Start MS-DOS and describe the difference between the DOS shell and the command prompt.

> Performance will be satisfactory if the student can enter the proper keystrokes to switch between DOS shell and the DOS command prompt.

Describe the difference between a cold and warm boot.

> Performance will be satisfactory if the student can describe the difference between a cold and warm boot on a worksheet.

Describe the naming conventions used with files.

> Performance will be satisfactory if the student can create a directory structure on a diskette.

Describe the naming conventions used with volumes and directories.

> Performance will be satisfactory if the student can properly name a disk volume, directory and a file.

Describe the command structure used for DOS commands.

> Performance will be satisfactory if the student can enter and execute basic DOS commands.

INTRODUCTION TO COMPUTERS II

Performance Objectives

Upon completion of this course, the student will be able to:

Define the difference between Internal & External DOS commands.

> Performance will be satisfactory if the student can list commands and identify then as Internal and External commands.

Describe what a Batch file is.

> Performance will be satisfactory if the student can describe the contents of a batch file.

Create a Batch file using the "COPY CON" command.

> Performance will be satisfactory if the student can use the COPY CON command to create a batch file.

Use the line editor "EDLIN" to modify the AUTOEXEC.BAT file.

> Performance will be satisfactory if the student can modify the AUTOEXEC.BAT file using EDLIN.

Describe the purpose of the CONFIG.SYS file.

> Performance will be satisfactory if the student can describe the commands used in the CONFIG.SYS file.

INTRODUCTION TO COMPUTERS II

Instructor Guide

This document is a Guide to be used by the instructor in teaching the INTRODUCTION TO COMPUTERS II Course. It also provides a means for updating the course. The TIPS & HINTS column in the outline segment of each section contains space for adding comments each time the course is run. This provides a way to pass on ideas and insight to other instructors that may teach the course.

The Instructor Guide is structured in sequence with the objectives. It is organized into thirteen (13) sections, each covering one objective.

The reference text for the course, Application Software for the IBM PC. Supplemental handouts are included to provide information and skill practice for the different features in DOS.

The OUTLINE portion of the Instructor Guide provides direction and timing for each session.

The instructor should facilitate the sequence and timing of the session and serve as an advisor should there be any questions.

Each section is divided into the following segments.

OBJECTIVE: Performance objective listed.

REFERENCE: Application Software for the IBM PC.

HANDOUT: Handout(s) to be used in each lesson.

TIMING: The approximate time required to accomplish the objective. These times will vary, a range of time for each objective is indicated. The times that are indicated reflect the time allocated for the particular lesson. Extra time should be allowed for hands-on practice.

OUTLINE: Provides the direction and timing for each objective. The outline sheet is in a split-sheet format, with the TOPICS listed in the left column and the TIPS & HINTS in the right column. These TIPS & HINTS are comments relative to this lesson that may be helpful to you the instructor. This portion of the guide should be updated each time the session is run. These notes are a great help to the instructor and will assist in making the guide most useful.

INTRODUCTION TO COMPUTERS II

Instructor Guide

OBJECTIVE: Introductions: Self. Students. Course and Text

HANDOUT: Registration forms
Course Syllabus

TIMING: 30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Registration:	
Distribute registration forms as required.	
Introductions:	
Introduce yourself and have students introduce themselves	Give them some guidance to help them - such as: Name Place of work Computer background Why they are taking Intro to Computers II
Introduce course:	
Distribute the course syllabus, review each sessions content.	Ask for questions and concern about the course or schedule.
Place the responsibility to learn on the students	Review the comments at the bottom of the syllabus.

Administer the quiz - point out that this is the same quiz as they will have at the end of the course.

INTRODUCTION TO COMPUTERS II

Course Syllabus

Phone: H 788-1792 B 788-3188
Course Dates: January 25
February 1, 8, 15, 22, 29

This course will allow you to continue your exploration of the computer to a greater depth. You will also have the opportunity to continue with the PC-TYPE, PC-CALC, and PC-FILE applications. Your class and lab time can be spent learning more about any of the applications or becoming more familiar with DOS.

DOS topics to be covered:

- I Disk Operating System
  - Power up sequence
  - Starting MS-DOS
  - Cold and Warm boot
- II Organizing volumes and files
  - Naming conventions
  - Directory and File tree structure
  - Getting around in the "tree"
- III DOS commands
  - Command structure
  - Internal / External commands
  - Using DOS Commands
- IV Batch files
  - AUTOEXEC.BAT
  - Creating Batch Files
  - Batch File Commands
- V Using Edlin to create and modify files
  - Edlin commands
  - Tips on using Edlin
- VI Configuring a system
  - Creating and modifying a CONFIG.SYS file

INTRODUCTION TO COMPUTERS II

Instructor Guide

OBJECTIVE: Describe what steps are performed during a computer power-up sequence including Power On Self Test.

HANDOUT: SYSTEM STARTUP

TIMING: 20 - 30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Review the startup sequence	
Have the students do a start-up and observe the sequence.	
Have them "find" the files described in the handout.	
Describe the hidden files - explain why they are hidden	

SYSTEM STARTUP

1. Apply power

2. Power supply self test - power good signal to Motherboard.

3. 8284 timer chip receives power good signal - stops generating a reset signal to the processor.

4. Processor executes instructions at FFFF:0000 - jump instruction to BIOS start location.

5. ROM BIOS starts and checks warm / cold boot flag. Warm start skips most of POST - cold start runs full POST.

6. POST begins and tests all major components and memory. Audio and video error messages indicate problems.

7. BIOS scans ROM for ROM programs in locations C000 through DF80. If found, they are tested and initialized.

8. BIOS searches for boot record on track 0 sector 1 on drive A. If found, it is loaded and executed. If not - continue.

9. BIOS looks for boot record on track 0 sector 1 on the hard disk. If found, it is loaded and executed.

10. The boot record (now in control) loads IBMBIO.COM and IBMDOS.COM and passes control to IBMBIO.COM.

11. IBMBIO.COM uses IBMDOS.COM to read CONFIG.SYS. Contents are used to establish system configuration, device drivers are loaded and any listed installable programs are loaded.

12. IBMBIO.COM uses IBMDOS.COM to load COMMAND.COM and passes control to COMMAND.COM.

13. COMMAND.COM loads and executes AUTOEXEC.BAT.

14. The DOS prompt appears.

CUSTOM TRAINING 1991

BEST COPY AVAILABLE

INTRODUCTION TO COMPUTERS II

Instructor Guide

OBJECTIVE: Start MS-DOS and describe the difference between the DOS shell and the command prompt.

HANDOUT: N / A

TIMING: 30 - 45 minutes

OUTLINE:

TOPIC	TIPS & HINTS
After loading, have them get into and out of the DOS SHELL. This may be a review for many of the students but there may be some new students that are unfamiliar with the DOS SHELL.	
Spend some time in the SHELL	
Be sure the students know their way around the SHELL	
Go to COMMAND PROMPT review the directory structure and some of the directory commands.	

INTRODUCTION TO COMPUTERS II

Instructor Guide

OBJECTIVE: Describe the difference between a cold and warm boot.

HANDOUT: BOOTING OR STARTING DOS (2 pages)

TIMING: 20 - 30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Review the handout -	
Go step by step and have the students answer where ever possible.	
Have them try and observe the difference between a COLD boot and a WARM boot.	
Discuss the POST and what it accomplishes.	
Review the drive designators A: B: C: etc.	

BOOTING OR STARTING DOS

To start or _________ DOS, means to load the _____________ files, IBMBIO.COM, IBMDOS.COM and COMMAND.COM into ___________. These DOS files reside on the ______ (_________) disk (C:) or on a __________________ to be used in the A drive (A:).

When the power is turned on, the system runs a P________ O___ S________ T________ (POST) to check ____________ and ____________ (peripheral) connections. Starting the system by turning the power on is called a ________ BOOT.

After completing ________, the system loads the DOS ____________ files and prompts the operator for the _________ and _________.

After the date and time have been ______________ entered, the system _________, A> or C> appears. The system is now ready to accept _______________ from the operator. The "A" or "C" part of the prompt indicates that the system is operating from that particular ___________.

The prompt indicates that DOS is ___________ and the system is expecting ______ _______________ to be entered.

BOOTING OR STARTING DOS
Continued

To restart the computer with ____________ already applied, you can do what is known as a ________ BOOT.

You may use this type of BOOT process whenever you want to _________ the system without turning the ____________ off.

A warm boot will ______________ whatever is in ____________. To do a warm boot hold down the _________ and _______ keys and press DEL.

INTRODUCTION TO COMPUTERS II

Instructor Guide

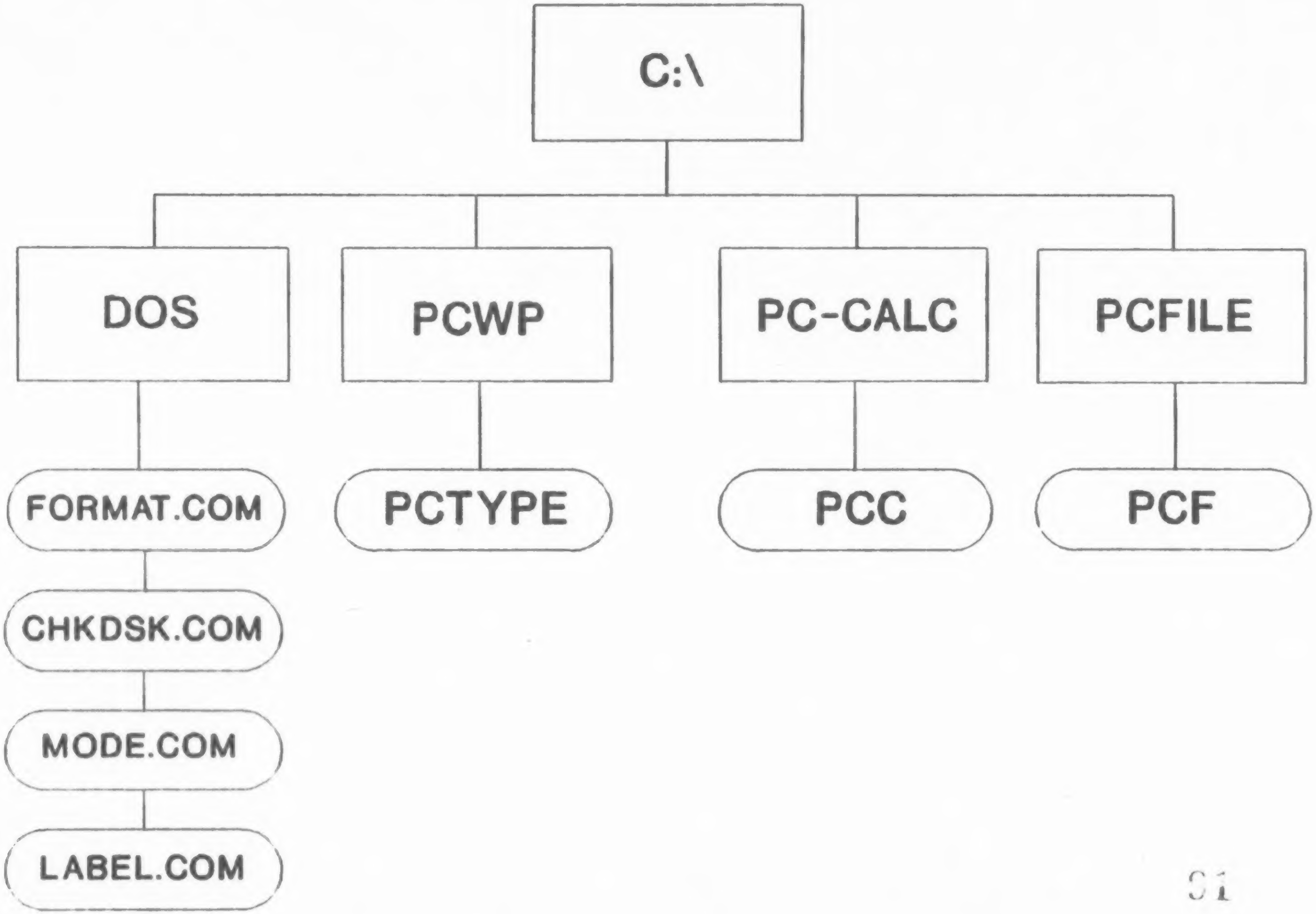
OBJECTIVE: Identify the structure of volumes, directories and files.

HANDOUT: DIRECTORIES AND THE TREE STRUCTURE
Directory Structure

TIMING: 30 - 45 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Review the handout -	
Go step by step and have the students answer where ever possible.	
Drive Specifier	
Volume Label	
Root Directory	
Subdirectories	
Changing Directories	
Path Names	
Directory Commands	
This should be a review for most students but not necessarily.	



C:\

DOS

PCWP

PC-CALC

PCFILE

FORMAT.COM

CHKDSK.COM

MODE.COM

LABEL.COM

PCTYPE

PCC

PCF

INTRODUCTION TO COMPUTERS II

Instructor Guide

OBJECTIVE: Describe the naming conventions used with files.

HANDOUT: FILES AND FILE NAMES

TIMING: 20 - 30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Review the handout -	
Go step by step and have the students answer where ever possible.	
File Names	
Extensions	
Reserved Names	
Global File Name Char's	
This may be a review for some students but not necessarily.	

FILE AND FILE NAMES

FILENAME

EXTENSION

RESERVED NAMES

GLOBAL FILE NAME CHARACTERS

INTRODUCTION TO COMPUTERS II

Instructor Guide

OBJECTIVE: Describe the naming conventions used with volumes, and directories.

HANDOUT:

TIMING: 10 - 15 minutes

OUTLINE:

TOPIC	TIPS & HINTS
There is no particular handout here.	
Review the naming conventions used with files.	
Same applies to directories, but the directory should have no extension.	
Have them do a directory using the "*." - `DIR *.` This will get a listing of the directories only - and the files that have no extension.	
Have them check the VOLUME LABEL of the C: drive.	
Have them label a A: or B: diskette.	They may have to format a diskette first.

DIRECTORIES AND THE TREE STRUCTURE

DRIVE SPECIFIER

VOLUME LABEL

ROOT DIRECTORY

SUBDIRECTORIES

CHANGING DIRECTORIES

PATH NAMES

DIRECTORY COMMANDS

INTRODUCTION TO COMPUTERS II

Instructor Guide

OBJECTIVE: Describe the command structure used for DOS commands.

HANDOUT: DOS COMMAND REFERENCE (5 pages)
DOS EXERCISE 1

TIMING: 45 - 60 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Review the DOS command structure.	
Review: DIR /P DIR /W FORMAT (and appropriate switches)	
Be sure to review the fact that the command name has to be seperated by a space.	This is a very basic concern but many of these students will have this problem (not leaving a space after the DOS command.
Have students complete DOS EXERCISE 1	Help the students through the exercise where needed.

D O S COMMANDS

Commands are what you, the operator, enter to tell DOS what to do. Some commands are ____________ commands and are called so because they are loaded into and are stored in the computer's ________________.

The other commands are _____________ commands and reside on the DOS disk or diskette. External commands are only accessable when the DOS disk and directory is the _____________ drive and directory.

Some INTERNAL commands are:

DATE
DEL
RENAME
TIME
ERASE
VOL
DIR
MD
TYPE
COPY
RD
CLS
CD
PATH

Commands can only be entered when the system __________ is present. The EXTERNAL command files must either be in the ______________ directory or a _______ to the command files must be included. Commands must be entered with specific _____________ and ____________________ that are unique to specific commands.

DOS COMMAND REFERENCE

The following is a composite of the commands that will be used in the labs for this class. Brackets [ ] indicate optional items in the command.

BACKUP - External command

BACKUP Drive:[\path\filename.ext] Drive:[/s][/d][/m]

/s also backs up subdirectory files.
/d backs up files that have been modified on or after a specified date.
/m backs up files that have been modified since the last backup.

examples:

BACKUP C:\ A:/S Back up the entire hard disk.
BACKUP C:\ACCTG A: Back up the files within \ACCTG.

CD (Change Directory) - Internal command

CD\Path\

examples:

CD\	Change current directory to root directory.
CD\ACCTG	Change current directory to \ACCTG.
CD	Display current directory.

CHKDSK - External command

CHKDSK [d:]

examples:

CHKDSK A:	Check the disk in drive A.
CHKDSK /f	Check the current disk and fix any lost clusters.

D O S COMMAND REFERENCE

COPY - Internal command

```
COPY [Drive:][\Path\]filename.ext [Drive:][\Path\][file]
```

examples:

```
COPY A:AUTOEXEC.BAT C:
```

Copy the AUTOEXEC.BAT file from Drive A to Drive C.

```
COPY A:GAME-A C:\FUN\GAME-B
```

Copy GAME-A from drive A to directory FUN of Drive C and rename the file to GAME-B.

DEL (DELete) - Internal command

```
DEL [Drive:][\Path\]filename.ext
```

examples:

```
DEL A:\ACCTG\ACCTS.REC
```

Delete the file ACCTS.REC under the \ACCTG directory

```
DEL A:*.BAK
```

Delete all files in the A drive with an extension of BAK.

```
DEL A:*.*
```

Delete all files in the A Drive.

DIR (DIRectory) - Internal command

```
DIR [Drive:][\Path\][filename.ext][/p][/w]
```

examples:

```
DIR
```

List a directory of the current directory on the current drive.

```
DIR C:\ACCTG/p
```

Display a listing of the ACCTG directory on drive C one page at a time.

D O S COMMAND REFERENCE

DISKCOPY - External command

DISKCOPY Drive: Drive:

examples:

DISKCOPY A: B:

Copy the entire contents of the diskette in drive A onto the diskette in drive B

DISKCOPY A: A:

Copy the entire contents of a diskette to another diskette using the A drive as the source and the destination.

FORMAT - External command

FORMAT Drive:[/s]

examples:

FORMAT A: Prepare the diskette in drive A as a data diskette.

FORMAT A:/s Prepare the diskette in drive A as a boot diskette.

MD (Make Directory) - Internal command

MD \Path\

examples:

MD MONEY Create a subdirectory called MONEY below the current directory

DOS COMMAND REFERENCE

PATH - Internal command

PATH [Drive:][\Path\][;\Path\]

examples:

PATH C:\;\DOS

Set the search path to include the root directory and the DOS subdirectory.

PATH Shows the current path.

PROMPT - Internal command

PROMPT [$X]   (Where X is equal to item in table A)

d = current date
t = current time
v = DOS version
g = >
b = |
h = backspace
- = carriage return and line feed
p = current directory
$ = $
n = default drive
l = <
q = =
e = escape character

examples:

PROMPT Hello !!!   Replace prompt with text "Hello !!!"

PROMPT $p   Replace prompt with current directory.

RD (Remove Directory) - Internal command

RD \Path\

example:

RD \ACCTG\MONEY   NOTE: Directory must be empty.

Remove the directory called MONEY under the \ACCTG directory.

D O S COMMAND REFERENCE

RENAME - Internal command

```
RENAME [Drive:][\Path\]filename.ext newname.ext
```

example:

```
RENAME C:\MONEY DOLLARS
```

Rename the file MONEY on drive C to DOLLARS.

RESTORE - External command

```
RESTORE Drive:[\Path\filename.ext] Drive:[/s][/p]
```

examples:

```
RESTORE A: C:\/s
```

Restore backed up diskettes to drive C including all subdirectories.

```
RESTORE A: C:\ACCTG
```

Restore files to \ACCTG on the C drive.

TYPE - Internal command

```
TYPE [Drive:][\Path\]filename.ext
```

example:

```
TYPE autoexec.bat
```

Display the contents of the ASCII file AUTOEXEC.BAT.

DOS EXERCISE 1

1. Use the DATE and TIME commands to set the date and time on your system.

2. Copy the C:\AUTOEXEC.BAT file to the DOS directory of A:. Write the command used to do that below.

   ____

3. Copy the C:\AUTOEXEC.BAT file to the DOS directory of A: and give it a new name of AUTOEXEC.BAK. Write the command used to do that below.

   ____

4. Use the RENAME command to rename the AUTOEXEC.BAK file to TESTING.123. Write the command below.

   ____

5. Use the DEL command to delete the file TESTING.123. Write the command below.

   ____

6. What is the other valid name for the DEL command?

   ____

7. Use the TYPE command to read the AUTOEXEC.BAT file.

   ____

8. Using the PROMPT command, change the prompt to have it indicate the current time, the current directory and the > sign. Write the appropriate command below.

   ____

INTRODUCTION TO COMPUTERS II

Instructor Guide

OBJECTIVE:	Define the difference between Internal & External DOS commands.
HANDOUT:	None
TIMING:	15 - 20 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Describe the INTERNAL vs. EXTERNAL commands.	
Have them try one of each: Internal: DIR or COPY External: CHKDSK or FORMAT	
Have them observe the action or lack of action on the disk drive.	
Review the commands that are typically found in the AUTOEXEC.BAT file. They will need this info for the next lab sessions.	

INTRODUCTION TO COMPUTERS II

Instructor Guide

OBJECTIVE: Describe what a Batch file is.

HANDOUT: BATCH FILES

TIMING: 15 - 20 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Use the first handout to describe what a BATCH file is.	
Have students access the AUTOEXEC.BAT file and then have them review the commands that are in the file.	

BATCH FILES

1. Using the TYPE command, display the AUTOEXEC.BAT file in the root directory of your disk.

    PROMPT

    PATH

    Others

2. Using the TYPE command display the CONFIG.SYS file.

    BUFFERS

    FILES

    ANSI.SYS

    Others

3. Other .BAT files?

    PCTOOLS - FORMAT.BAT

4. Create a BATCH file to accomplish what you did in the DOS 3 lab. Use the directory name of BATCH.LAB, and include a PAUSE command after each of the CHKDSK commands.

INTRODUCTION TO COMPUTERS II

Instructor Guide

OBJECTIVE: Create a Batch file using the "COPY CON" command.

HANDOUT: DOS EXERCISE 2

TIMING: 45 - 60 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Have students complete DOS EXERCISE 2	Help the students through the exercise where needed.

DOS EXERCISE 2

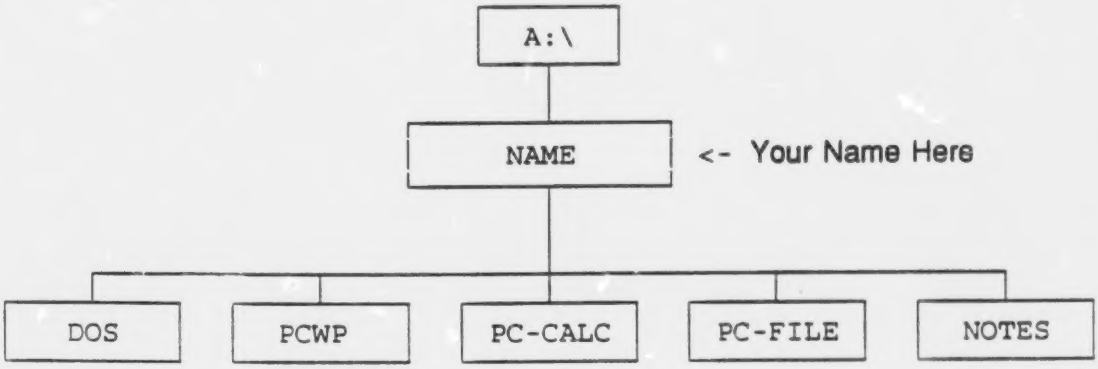
1. Use the CHKDSK command to determine how much space is available on your A: diskette. Record the first three lines of the CHKDSK information below.

____

____

____

2. Create a DIRECTORY structure on the newly formatted diskette as indicated below. A:\ is called the ___________ directory. NAME is the first _____-______________. Use your name for this directory, and then create the subdirectories below the directory of your NAME.



3. After creating the above directory structure, execute a CHKDSK command for A: and record the statistics below.

____

____

____

4. Note the difference between "bytes available on disk" for this CHKDSK report and the previous page. How many BYTES does this directory structure take?

_______________ BYTES for the directory structure.

DOS EXERCISE 2

5. Change the current directory to A:\NOTES. Enter the "DIR" command for the A:\NOTES directory. What does the . and .. mean?

   . means ______________________________

   . . means ______________________________

6. Create a file called ADDRESS under the directory called NOTES. Follow the steps a. - e. below.

   a. COPY CON A:\NAME\NOTES\ADDRESS
   b. NAME
   c. ADDRESS
   d. CITY, STATE ZIP
   e. ^Z (This is an EOF "End Of File" mark)

7. Using the TYPE command, view the file you just created. List the command you use to do this in the space below.

   ____

8. In the space below, write the command you would use to output this file to a printer.

   ____

INTRODUCTION TO COMPUTERS II

Instructor Guide

OBJECTIVE: Use the line editor "EDLIN" to modify the AUTOEXEC.BAT file.

HANDOUT: EDLIN

TIMING: 45 - 60 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Review the EDLIN handout	
Step through the process to access EDLIN, review the process of editing an existing file versus creating a new file.	
Demonstrate the various edit commands.	Do only the basic commands at at his time.
Have them edit the AAUTOEXEC .BAT file. Review the pieces of the file so they understand what the file does.	

EDLIN - The Line Editor

This lab will introduce you to some of the basic EDLIN functions. You will load a file into the Line Editor, make changes to it, and re-write it back to disk.

1. Using the TYPE command, display your name and address from the file on your diskette.

   (This is the file you will be editing)

2. Using EDLIN, edit the address file as follows:

   Change your name to all CAPS.
   Put a space between your name and the address.
   Add a blank line and your phone number to the file.

Command used to start EDLIN

EDLIN Command to redo line

EDLIN Command for Insert

EDLIN Command for Delete

EDLIN Command to append

End EDLIN (2 ways)

INTRODUCTION TO COMPUTERS II

Instructor Guide

OBJECTIVE: Describe the purpose of the CONFIG.SYS file.

HANDOUT: CONFIG.SYS

TIMING: 20 - 30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Review the handout.	
Explain the purpose of the file, and what it provides for the start up procedure.	
Have them use EDLIN to acess and modify the file.	

CONFIG.SYS

CONFIG.SYS is the configuration file that gives DOS specific information about the system. It provides information as to how much memory to use for disk and file storage and how to control certain parts of the computer via device drivers.

There are about 12 CONFIG.SYS commands used in the CONFIG.SYS file but there are only 3 that need attention.

BUFFERS	The BUFFERS command is used to set the number of file buffers that DOS uses. This varies with different programs - 20 or 30 is common. The buffers are areas of memory that are set aside to store information as it is read from or written to disk.
FILES	The FILES command is used to specify the number of files that are allowed to be open at one time. This also varies relative to the program used. As with BUFFERS, 20 or 30 is common.
DEVICE	The DEVICE command is use to load device drivers. A device driver is used for add-on devices such as extra memory, a mouse or CD-ROM. The DEVICE command is often loaded automatically when the device is installed.

In most cases, the CONFIG.SYS file is modified as needed when programs are installed. However, it is a good idea to be aware of the basic commands in the event you need to modify the CONFIG.SYS file.

Introduction to Computers II

Final Exam

1. The Disk Operating System (DOS) is usually purchased on

__________________ and then installed on the _________ _________.

2. Listed below are the versions of DOS that are typically used. Circle the version numbers that include the DOSSHELL.

Ver 3.2 Ver 3.3 Ver 4.01 Ver 5.0

3. Match the following functions with the corresponding key strokes.

Function	Key Strokes
____ DOSSHELL to DOS Prompt	a. EXIT
____ DOS Prompt to DOSSHELL	b. SHIFT/F9
____ DOS Prompt to DOSSHELL	c. DOSSHELL

4. When naming the Volume (disk or diskette) as many as ______ characters are allowed.

5. When naming files or directories, as many as ______ characters are allowed. (Do not include the 3 character extension.)

6. The main directory of a disk or diskette, for example C:\ or

B:\ is called the __________ directory. The directories below

that directories are called ________ directories.

7. Write the command below that will give a listing of all files in the current directory that have a .COM extension.

____

8. If the notch on the 5¼" floppy diskette is covered, it means:

   a. the diskette can be written on

   b. the diskette cannot be written on

9. Match the diskettes with the capacities:

Diskette	Capacity
____ 5¼ Diskette DS DD	a. 720 KB
____ 5¼ Diskette HC	b. 1.2 MB
____ 3½ Diskette DS DD	c. 1.44 MB
____ 3½ Diskette HC	b. 360 KB

10. Identify the following DIRECTORY commands:

    CD ______________________________

    MD ______________________________

    RD ______________________________

11. When the computer is first turned on, the POST runs to check the system. What do the letters P O S T stand for?

    P__________ O____ S_____ T______

12. What is the key combination used to REBOOT the system without turning the power off?

    ________ ________ ________

13. The first file that is read by the computer on power-up is

    the ______________.______ file.

14. If the command CD C:\PCWP is entered, what will the system prompt look like?

    ____

15. Match the diskette types with the correct FORMAT commands. The FORMAT command assumes use of the A: drive.

	Diskette		FORMAT Command
____	5¼ DS Diskette in a "high capacity" drive	a.	FORMAT A:/F:720
____	5¼ HC Diskette in a "high capacity" drive	b.	FORMAT A:
____	3½ DS Diskette in a "high capacity" drive	c.	FORMAT A:/4
____	3½ HC Diskette in a "high capacity" drive		

16. What command allows you to indicate to the computer where to look for the commands that are entered?

____

17. What command provides information as to the amount of data space that is remaining on the disk or diskette?

____

18. There are various types of files used in DOS but the three types of files that will "RUN" have specific three-letter extensions. What are the dot (.) extensions?

. _______ . _______ . _______

19. The line editor included with DOS is called _______________.

20. The two most common CONFIG.SYS commands are:

a. PATH
b. FILES
c. PROMPT
d. BUFFERS

COURSE EVALUATION
SKILL ENHANCEMENT TRAINING PROGRAM

COURSE ______________________________ DATE COMPLETED ______

INSTRUCTOR: ____________________

DIRECTIONS: Circle the number on the right to indicate how satisfied you are with the following aspects of the course you just completed. (5 = very satisfied; 1 = not satisfied)

	Not Satisfied				Very Satisfied
1. Course Goals (specific, clearly communicated)	1	2	3	4	5
2. Content, Subject Matter (organized, appropriate for course goals)	1	2	3	4	5
3. Written Materials and Resources (up-to-date, easy to read, and/or follow)	1	2	3	4	5
4. Support from instructor (quick, courteous, helpful)	1	2	3	4	5

What did you like about the course? ______________________________

____

What didn't you like about the course? ______________________________

____

What job related topics would you like addressed in future training sessions?

____

___ I would be interested in a follow-on group of computer classes.

___ A weekday evening would be most convenient. ___AM ___PM

___Mon ___Tues ___Wed ___Thurs ___Fri

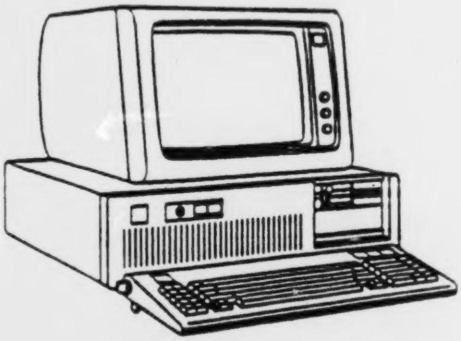
___ Saturday morning classes would be most convenient.

Please jot down any other comments you may have below.

3/92

WORKPLACE LITERACY PROJECT

COMPUTER TRAINING



WORKPLACE LITERACY RESOURCE CENTER
1-800-832-4916

MINNESOTA TEAMSTERS SERVICE BUREAU
NORTHEAST METRO TECHNICAL COLLEGE

WORD PROCESSING WITH PCTYPE

WORKPLACE LITERACY PROJECT

COMMERCIAL DRIVERS LICENSE

JEAN C. DUNN
Executive Director
Minnesota Teamsters Service Bureau

DR. PAUL BORANIAN
Project Director
Minnesota Teamsters Service Bureau

DR. BILL WARNER
President
Northeast Metro Technical College

JON A. HARBACK
Project Coordinator
Northeast Metro Technical College

Special thanks to Harold Yates, President of the Minnesota Teamsters Joint Council #32 for facilitating the involvement of a number of trucking companies in the Minnesota Teamsters Service Bureau Workplace Literacy Project

1992

WORD PROCESSING with PCTYPE

Course Description

This 3-session Word Processing workshop covers the PC-TYPE program in detail. During the three sessions, students concentrate on using PCTYPE for word processing.

Students will use the various features of PCTYPE to include marking of text to delete, copy, move or enhance text. This hands-on workshop will give students a chance to learn and use the features by editing a business letter. Most skills learned in this workshop will transfer to many other word processing program.

WORD PROCESSING using PC-TYPE

Performance Objectives

Access and start the PCTYPE Word Processing program.

> Performance will be satisfactory if the student can make appropriate entries on the keyboard to access and start the PCWP program.

Retrieve a file stored on a diskette using the GET command.

> Performance will be satisfactory if the student can make retrieve a file stored on the Student Data Diskette.

Define text entry and cursor movement keys used in the PCTYPE program.

> Performance will be satisfactory if the student can enter data and demonstrate use of the cursor movement keys.

Define the Function Keys displayed on the Message Line of the PCTYPR screen.

> Performance will be satisfactory if the student can enter data and demonstrate use of the cursor movement keys.

Define the use of Margins, Tabs & Indenting with the PCTYPE Column Ruler.

> Performance will be satisfactory if the student can change Margins, Tabs & Indent symbols.

Demonstrate the marking of text to delete, copy, move or enhance text.

> Performance will be satisfactory if the student can mark text to delete, copy, move or enhance it.

Demonstrate the use of the Special features.

> Performance will be satisfactory if the student can demonstrate changing "case", splitting a line, use of the number pad and page control features.

Demonstrate the use of the Spell Check feature.

> Performance will be satisfactory if the student can use the Spell Check feature.

Demonstrate the use of a Keystroke Macro.

> Performance will be satisfactory if the student can create a Keystroke Macro.

Create Line and Box Drawing using PCTYPE.

> Performance will be satisfactory if the student can create a box drawing using PCTYPE.

WORD PROCESSING using PC-TYPE

Instructor Guide

This document is a Guide to be used by the instructor in teaching the WORD PROCESSING using PC-TYPE Course. It also provides a means for updating the course. The TIPS & HINTS column in the outline segment of each section contains space for adding comments each time the course is run. This provides a way to pass on ideas and insight to other instructors that may teach the course.

The Instructor Guide is structured in sequence with the objectives. It is organized into ten (10) sections, each covering one objective.

The reference text for the course, Application Software for the IBM PC. Supplemental handouts are included to provide information and skill practice for the different features in PCTYPE.

The OUTLINE portion of the Instructor Guide provides direction and timing for each session.

The instructor should facilitate the sequence and timing of the session and serve as an advisor should there be any questions.

Each section is divided into the following segments.

OBJECTIVE: Performance objective listed.

REFERENCE: Application Software for the IBM PC.

HANDOUT: Handout(s) to be used in each lesson.

TIMING: The approximate time required to accomplish the objective. These times will vary, a range of time for each objective is indicated. The times that are indicated reflect the time allocated for the particular lesson. Extra time should be allowed for hands-on practice.

OUTLINE: Provides the direction and timing for each objective. The outline sheet is in a split-sheet format, with the TOPICS listed in the left column and the TIPS & HINTS in the right column. These TIPS & HINTS are comments relative to this lesson that may be helpful to you the instructor. This portion of the guide should be updated each time the session is run. These notes are a great help to the instructor and will assist in making the guide most useful.

WORD PROCESSING with PCTYPE

Instructor Guide

OBJECTIVE: Introductions: Self, Students, Course and Text

REFERENCE: Application Software for the IBM PC

HANDOUT: Registration forms
Course Syllabus
Precourse Quiz

TIMING: 30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Registration: Distribute registration forms as required.	
Introductions: Introduce yourself and have students introduce themselves	Give them some guidance to help them - such as: NAME PLACE OF WORK COMPUTER BACKGROUND WHY THEY ARE WORD PROC
Introduce course: Distribute the workbook.	Students read "To the Student on page vii of the text.
Distribute the course syllabus, review each sessions content.	Ask for questions and concern: about the course or schedule.
Place the responsibility to learn on the students	Review the comments at the bottom of the syllabus.
Distribute the pre-course quiz. Explain that this is the same quiz that will be given at the end of the course.	

WORD PROCESSING using PC-TYPE

Course Syllabus

Text: Application Software for the IBM PC
Dates: Xxxxx XX - Xxxxx XX

XX Xxxxx PRE COURSE QUIZ

Starting the PC-TYPE program

GET a file stored on a diskette

The Screen
- Text Entry
- Message Line (Function Keys)
- Column Ruler

Margins, Tabs & Indenting

Marking Text - Delete, Copy or Move Text

Cursor Movement

XX Xxxxx REVIEW OF LAST WEEK

Underline and Boldface Text

Spell Check

Search and Replace

Auto Page / User Page

XX Xxxxx REVIEW OF LAST 2 WEEKS

Merging Text Files

Printing Text

Keystroke Macros

Line and Box Drawing

Wrap up - Final Exam

PC-TYPE+

PRE / POST QUIZ

Name ______________________

1. What does the word wrap function do?

   ____

2. What does it mean to "reformat" a paragraph?

   ____

3. What is the difference between an indent tab and a normal tab?

   ____

4. What is meant by "marking" text?

   ____

5. After text is marked, what functions can be performed with it?

   ____

6. Explain the difference between User-Page and Auto-Page lines.

   ____

7. List the steps necessary to merge two files.

   ____

8. If you execute the DOS DIR B: command, what type of information will appear on the screen?

   ____

9. What key must to be pressed to bring up the HELP menu?

   ____

10. Describe the difference between F9 and SHIFT/F9.

    ____

    ____

WORD PROCESSING with PCTYPE

Instructor Guide

OBJECTIVE: Access and start the PCTYPE Word Processing program.

REFERENCE: Application Software for the IBM PC

HANDOUT: Worksheet 1

TIMING: 10 - 15 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Starting the program should be easy for most of the students.	There may be some students that haven't been through the Intro course so they may need more direction.
Review the directory structure and how to get around the system and access the programs.	Be sure to review the process well enough to verify that students understand how to access programs.

WORD PROCESSING using PC-TYPE

Worksheet 1

Starting the PC-TYPE program

Retrieving a file stored on the Student Data Disk

Margins, Tabs and Indenting

Entering a DATE and TIME Stamp

Reformatting a paragraph

Marking text

Delete, Copy or Move Text

Insert, Delete, Backspace, and Cursor Movement

Saving a file to the Student Data Disk

WORD PROCESSING with PCTYPE

Instructor Guide

OBJECTIVE: Retrieve a file stored on a diskette using the GET command.

REFERENCE: Application Software for the IBM PC

HANDOUT: Worksheet 1

TIMING: 10 - 15 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Once the program is accessed the retrieval of a file from either A: or B: must be done.	Step through the process of retrieving a file. Be prepared for students to ask DOS related questions.
Use the "GET" command - be sure that students understand the difference between commands within a program and DOS commands.	
Retrieve the file "MEMODRFT" from the Student Data Disk.	
Also review/show students how to enter a DOS command from the PCTYPE program.	

WORD PROCESSING with PCTYPE

Instructor Guide

OBJECTIVE: Define text entry and cursor movement keys used in the PCTYPE program.

REFERENCE: Application Software for the IBM PC

HANDOUT: Worksheet 1
PCTYPE - TIPS (5 pages)

TIMING: 45 - 60 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Have students do the worksheet and make notes as to the particular keystrokes required for each feature.	Suggest that the students take notes on the different operations. Students may not initiate note taking on their own. Give the students pleanty of time to enter text and get familiar with the text entry and cursoe movement keys.

PCTYPE - TIPS

CURSOR MOVEMENT

Insert	Pushes characters to the right
Delete	Deletes character at cursor position
Backspace	Deletes character to the left of cursor
Ctl /	One word to the right
Ctl /	One word to the left
Ctl /	Move up one paragraph
Ctl /	Move down one paragraph
Page Up	Move up one screen
Page Down	Move down one screen
Ctl / Page Up	To the top of document
Ctl / Page Down	To the top of document
Home	To beginning of line
End	To end of line
Ctl / Home	To top of screen
Ctl / End	To bottom of screen

MARGINS, TABS & INDENT

F8 - F8 Cursor appears on the command line

Enter "L" for left margin
Enter "T" for tabs where desired
Enter "R" for right margin
Enter "I" for indent position

PCTYPE - TIPS

MARKING & MANIPULATING TEXT

Alt / L	Marks entire line at cursor
Ctl / L (2)	1st Ctl/L - Begins text marking 2nd Ctl/L - Ends text marking
Alt / D	Deletes marked text
Alt / C	Copies marked text below cursor
Ctl / C	Inserts marked text at cursor location
Alt / M	Moves marked text to below cursor
Ctl / M	Moves marked text to cursor location

TEXT ENHANCEMENTS

Emphasize	F3 - F1 to begin F3 - Shift F1 to end
Underline	F3 - F2 to begin F3 - Shift F2 to end
Double Strike	F3 - F3 to begin F3 - Shift F3 to end
Italics	F3 - F6 to begin F3 - Shift F6 to end
Delete PrC at cursor	F3 - F8
Delete PrC on line	F3 - F9
Delete all PrC in file	F3 - F10

CURSOR MOVEMENT

Insert	Pushes characters to the right
Delete	Deletes character at cursor position
Backspace	Deletes character to the left of cursor
Ctl /	One word to the right
Ctl /	One word to the left
Ctl /	Move up one paragraph
Ctl /	Move down one paragraph
Page Up	Move up one screen
Page Down	Move down one screen
Ctl / Page Up	To the top of document
Ctl / Page Down	To the bottom of document
Home	To beginning of line
End	To end of line
Ctl / Home	To top of screen
Ctl / End	To bottom of screen

MARGINS, TABS & INDENT

F8 - F8	Cursor appears on the command line

Enter "L" for left margin
Enter "T" for tabs where desired
Enter "R" for right margin
Enter "I" for indent position

MARKING & MANIPULATING TEXT

Alt / L	Marks entire line at cursor
Ctl / L (2)	1st Ctl/L - Begins text marking 2nd Ctl/L - Ends text marking
Alt / D	Deletes marked text
Alt / C	Copies marked text below cursor
Ctl / C	Inserts marked text at cursor location
Alt / M	Moves marked text to below cursor
Ctl / M	Moves marked text to cursor location
Alt / U	Unmark any marked text

TEXT ENHANCEMENTS

Emphasize	F3 - F1 to begin F3 - Shift F1 to end
Underline	F3 - F2 to begin F3 - Shift F2 to end
Double Strike	F3 - F3 to begin F3 - Shift F3 to end
Italics	F3 - F6 to begin F3 - Shift F6 to end
Delete PrC at cursor	F3 - F8
Delete PrC on line	F3 - F9
Delete all PrC in file	F3 - F10

INSERTING A DATE STAMP

Place the cursor where you want the date or time

For current date - F8 - F5

For current time - F8 - Shift F5

CHANGING "CASE"

To change from UPPER to lower case mark text & press Ctl / T

To change from lower to UPPER case mark text & press Alt / T

TO USE THE NUMBER PAD

Hold Ctl / Alt and Press Num Lock

Press Num Lock to cancel

SPLITTING A LINE

Place cursor at location of desired split.

Press Ctl / ~ to split line.

Remove leading spaces with Backspace or Delete.

PAGE CONTROLS

Ctl / P	Inserts auto paging
Alt / P	Inserts page break

FAULT FINDER

Move cursor to beginning of text.
F8 - F6 to start spell checking.
Alt / Z to continue spell checking.

SEARCH & REPLACE

/PENCIL/PEN/	Search for text between first two slashes Replace with text between last two slashes

Above example searches text for PENCIL and replaces all occurrences of PENCIL with PEN.

PRINTING

Press Shift / F3

Tab to each selection on screen

Change as desired using up or down arrows or a number key as required.

MERGING A FILE

To merge a file from disk:

Place the cursor where you want to insert text.

Use the "GET" command to retrieve a file.

WRITING A MACRO

A macro is a sequence of keystrokes that are saved and can be repeated with only one keystroke. For example, you could record your name and address as a macro and then re-type the entire address with a single keystroke.

To create a macro

- Start "recording" the macro with an Alt / Y.
- Enter the necessary keystrokes to complete the task.
- Press Alt / Y to stop recording the macro.

For a "repeating" macro - such as underlining a specific word each time it occurs can be done by creating the macro as indicated above and pressing Ctl /Y rather that Alt / Y to stop recording the macro.

WORD PROCESSING with PCTYPE

Instructor Guide

OBJECTIVE: Define the Function Keys displayed on the Message Line of the PCTYPR screen.

REFERENCE: Application Software for the IBM PC

HANDOUT: N/A

TIMING: 20 - 30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Describe or define the F1 - F10 function keys and their purpose.	Have students try the different keys. Again, encourage them to make notes for future use.

WORD PROCESSING with PCTYPE

Instructor Guide

OBJECTIVE:	Define the use of Margins, Tabs & Indenting with the PCTYPE Column Ruler.
REFERENCE:	Application Software for the IBM PC
HANDOUT:	PCTYPE - TIPS (5 pages)
TIMING:	30 - 45 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Demonstrate the use of the ruler at the bottom of the screen.	
Use the file "MEMODRFT" to change the margins and tabs.	Review the margins, tabs and indenting in general terms. Some of the students may not be familiar with the terms or what they do.
Discuss and apply the indent feature on the "MEMODRFT" file.	
	Be sure to provide sufficient time to allow them to practic the margins, tabs & indenting

WORD PROCESSING with PCTYPE

Instructor Guide

OBJECTIVE: Demonstrate the marking of text to delete, copy, move or enhance text.

REFERENCE: Application Software for the IBM PC

HANDOUT: Worksheet 1
PCTYPE - TIPS (5 pages)
PCTYPE - EDITING EXERCISE

TIMING: 45 - 60 minutes

OUTLINE:

TOPIC	TIPS & HINTS
As with all of the PCTYPE features, you as the instructor should demonstrate the feature and then have the students try them either at the same time or after you demo the feature.	
Cover the following to mark text, delete, copy and move text: Alt / L Ctl / L Alt / D Alt / C Ctrl / C Alt / M Ctrl / M	This is a good time to give the students the PCTYPE - EDITING EXERCISE. This will give them a chance to start using the different features with an existing file. There are some items that will have to be covered before they can complete the exercise.
Cover the following text enhancements: Emphasize Underline Double strike Italics	
Also cover the delete print character (PrC) methods	

13 June 1987 General Hospital Floor 13. Room 13. Bed 13 Hopelessville, Minnesota 51313 I am dictating this leter to my new secretery as I am recooperating from my recent acident. Below is a detaled account of my accidint. Please send my insurance check to me at the hospitle. I expect to be back to work within six to eight weeks. It all began as I was wurking to replace the shingles on my hoose. I was using a rope and pully arrangement to hoist a smal barrel of nails up to the roof. As the barrel neared the rim of the roof, a stack of briks fell from the scafolding next to the house inta the barrel. This made the barrel heavier than me. As a risult, the barrel came down. My foot got caught in a loop in the rope and it hoisted me up to the roof. On my way up, the barrel hit me on its way down and broake my arm in two places. When the barrel hit the ground, it broke and spilld the nails and briks on the ground. This made the barrel lighter than me and down I came, breking both legs as I hit the ground. As I hit the ground, I let go of the rope. This causd the barrel to come down, stricking me and breakig my othr arm. Very Truly Yors Mr. Lucky Dog

PCTYPE - EDITING EXERCISE

1. GET the file EXERCISE from the instructor diskette.
2. Correct the line spacing to look like the letter below.
3. Do a spell check and correct all spelling errors.
4. Move the two sentences beginning with "Please send my ...." to the bottom of the letter as shown below.
5. Use "Search and Replace" to change all occurrences of the word "barrel" to "keg".
6. Underline the 2nd sentence in the first paragraph.
7. Italicize the words "*at the hospital*" in the last paragraph.

****

13 June 1987
General Hospital
Floor 13, Room 13, Bed 13
Hopelessville, Minnesota 51313

I am dictating this letter to my new secretary as I am recuperating from my recent accident. Below is a detailed account of my accident.

It all began as I was working to replace the shingles on my house. I was using a rope and pulley arrangement to hoist a small keg of nails up to the roof. As the keg neared the rim of the roof, a stack of bricks fell from the scaffolding next to the house into the keg. This made the keg heavier than me. As a result, the keg came down. My foot got caught in a loop in the rope and it hoisted me up to the roof. On my way up, the keg hit me on its way down and broke my arm in two places. When the keg hit the ground, it broke and spilled the nails and bricks on the ground. This made the keg lighter than me and down I came, breaking both legs as I hit the ground. As I hit the ground, I let go of the rope. This caused the keg to come down, striking me and breaking my other arm.

Please send my insurance check to me *at the hospital.* I expect to be back to work within six to eight weeks.

Very Truly Yours

Mr. Lucky Dog

WORD PROCESSING with PCTYPE

Instructor Guide

OBJECTIVE: Demonstrate the use of the PCTYPE Special features.

REFERENCE: Application Software for the IBM PC

HANDOUT: PCTYPE - TIPS (5 pages)

TIMING: 45 - 60 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Demonstrate the use of:	
Inserting a date stamp	
Changing from upper case to lower case and vice-versa.	
Use of the number pad	This is not as simple as pressing Num Lock as it is with other programs.
Splitting a line	Likewise, this is not as straight forward as pressing <Enter>.
Page controls Ctrl / P Alt / P	

WORD PROCESSING with PCTYPE

Instructor Guide

OBJECTIVE: Demonstrate the use of the Spell Check feature.

REFERENCE: Application Software for the IBM PC

HANDOUT: PCTYPE - TIPS (5 pages)

TIMING: 20 - 30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
First of all - this is not a normal Spell Checker. Most spell checkers will find a misspelled word and then give possible correct spellings for the word.	
This is - as it is called, a "Fault Finder" - not a spell checker in the traditional sense.	Again, demonstrate for them and then have them try it using the EDITING EXERCISE.

WORD PROCESSING with PCTYPE

Instructor Guide

OBJECTIVE: Demonstrate the use of a Keystroke Macro.

REFERENCE: Application Software for the IBM PC

HANDOUT: PCTYPE - TIPS (5 pages)

TIMING: 20 - 30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Demonstrate the MACRO by creating a MACRO for the Name and Address as indicated in the handout.	Be sure to explain the concept of a Macro. Many students won't have a clue as to what a Macro is and how it can be used.
Point out that the example in the reference guide is for a "repeating" Macro.	

WORD PROCESSING with PCTYPE

Instructor Guide

OBJECTIVE: Create Line and Box Drawing using PCTYPE.

REFERENCE: Application Software for the IBM PC

HANDOUT: LINE and BOX DRAWING

TIMING: 15 - 20 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Review the box draw - and demonstrate the process.	
Make sure that they understand that the box draw will overwrite existing data.	
The box draw requires some pre-planning as to where the box will be drawn.	
Review the draw screen and how the box draw characters can be changed to create a different box effect.	

COURSE EVALUATION
SKILL ENHANCEMENT TRAINING PROGRAM

COURSE ______________________________ DATE COMPLETED ______

INSTRUCTOR: ____________________

DIRECTIONS: Circle the number on the right to indicate how satisfied you are with the following aspects of the course you just completed. (5 = very satisfied; 1 = not satisfied)

	Not Satisfied			Very Satisfied	
1. Course Goals (specific, clearly communicated)	1	2	3	4	5
2. Content, Subject Matter (organized, appropriate for course goals)	1	2	3	4	5
3. Written Materials and Resources (up-to-date, easy to read, and/or follow)	1	2	3	4	5
4. Support from instructor (quick, courteous, helpful)	1	2	3	4	5

What did you like about the course? ______________________________

____

What didn't you like about the course? ______________________________

____

What job related topics would you like addressed in future training sessions?

____

___ I would be interested in a follow-on group of computer classes.

___ A weekday evening would be most convenient. ___AM ___PM

___Mon ___Tues ___Wed ___Thurs ___Fri

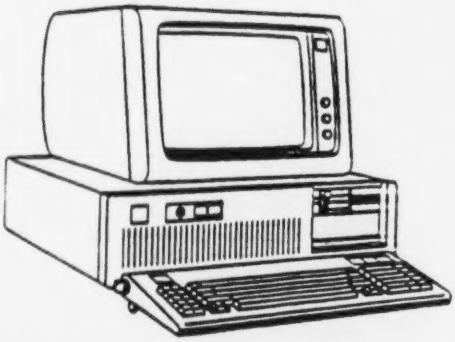
___ Saturday morning classes would be most convenient.

Please jot down any other comments you may have below.

3/92

WORKPLACE LITERACY PROJECT

COMPUTER TRAINING



WORKPLACE LITERACY RESOURCE CENTER
1-800-832-4916

MINNESOTA TEAMSTERS SERVICE BUREAU
NORTHEAST METRO TECHNICAL COLLEGE

ELECTRONIC SPREADSHEETS USING PCCALC

WORKPLACE LITERACY PROJECT

COMMERCIAL DRIVERS LICENSE

JEAN C. DUNN
Executive Director
Minnesota Teamsters Service Bureau

DR. PAUL BORANIAN
Project Director
Minnesota Teamsters Service Bureau

DR. BILL WARNER
President
Northeast Metro Technical College

JON A. HARBACK
Project Coordinator
Northeast Metro Technical College

Special thanks to Harold Yates, President of the Minnesota Teamsters Joint Council #32 for facilitating the involvement of a number of trucking companies in the Minnesota Teamsters Service Bureau Workplace Literacy Project

1992

ELECTRONIC SPREADSHEETS using PCCALC

Course Description

This three-session Electronic Spreadsheet workshop covers the PC-CALC program in detail. For workshop projects students will create and edit spreadsheets using practical home and business examples.

Students will enter data, including text and formulas into cells, copy cell information from one cell to another, and print the spreadsheet data.

Keystroke Macros will be learned and students will develop a graph using the spreadsheet data.

The skills and concepts used in this workshop are usable in other spreadsheet programs.

ELECTRONIC SPREADSHEETS using PCCALC

Performance Objectives

Access and start PC-CALC, the Spread Sheet program.

> Performance will be satisfactory if the student can make appropriate entries on the keyboard to access and start the PC-CALC program.

Load spreadsheet data using a student data diskette and describe the spreadsheet components used with the PCCALC program.

> Performance will be satisfactory if the student can retrieve spreadsheet data from a student data diskette and define cells, columns and rows and how they are used in the PC-CALC program.

Enter data, text and formulas into cells to accomplish a simple spreadsheet application.

> Performance will be satisfactory if the student can enter spreadsheet data for home finances into the PC-CALC program.

Demonstrate the copying of cell information from one cell to another.

> Performance will be satisfactory if the student can copy cell information from one cell to another.

Enter the appropriate keystrokes to print the spreadsheet data.

> Performance will be satisfactory if the student can provide a printout of the spreadsheet data for home finances.

Enter the appropriate keystrokes to create a Keystroke Macro.

> Performance will be satisfactory if the student can enter the appropriate keystrokes to create a Keystroke Macro.

Develop a graph as output using the spreadsheet data for home finances.

> Performance will be satisfactory if the student can enter the appropriate keystrokes to create a graph using the spreadsheet data for home finances.

Save spreadsheet data using a student data diskette.

> Performance will be satisfactory if the student can save the spreadsheet data onto a student data diskette.

ELECTRONIC SPREADSHEETS using PCCALC

Instructor Guide

This document is a Guide to be used by the instructor in teaching the Electronic Spreadsheets Using PC-CALC Course. It also provides a means for updating the course. The TIPS & HINTS column in the outline segment of each section contains space for adding comments each time the course is run. This provides a way to pass on ideas and insight to other instructors that may teach the course.

The Instructor Guide is structured in sequence with the objectives. It is organized into eight (8) sections, each covering one objective.

The reference text for the course, Application Software for the IBM PC. Supplemental handouts are included to provide information and skill practice for the different features in PCCALC.

The OUTLINE portion of the Instructor Guide provides direction and timing for each session.

The instructor should facilitate the sequence and timing of the session and serve as an advisor should there be any questions.

Each section is divided into the following segments.

OBJECTIVE:	Performance objective listed.
REFERENCE:	Application Software for the IBM PC.
HANDOUT:	Handout(s) to be used in each lesson.
TIMING:	The approximate time required to accomplish the objective. These times will vary, a range of time for each objective is indicated. The times that are indicated reflect the time allocated for the particular lesson. Extra time should be allowed for hands-on practice.
OUTLINE:	Provides the direction and timing for each objective. The outline sheet is in a split-sheet format, with the TOPICS listed in the left column and the TIPS & HINTS in the right column. These TIPS & HINTS are comments relative to this lesson that may be helpful to you the instructor. This portion of the guide should be updated each time the session is run. These notes are a great help to the instructor and will assist in making the guide most useful.

ELECTRONIC SPREADSHEETS using PCCALC

Instructor Guide

OBJECTIVE: Introductions: Self, Students, Course and Text

REFERENCE: Application Software for the IBM PC

HANDOUT: Registration forms
Course Syllabus
Pre/Post Quiz

TIMING: 30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Registration:	
Distribute registration forms as required.	
Introductions:	
Introduce yourself and have students introduce themselves	Give them some guidance to help them - such as: NAME PLACE OF WORK COMPUTER BACKGROUND WHY THEY ARE WORD PROC
Introduce course:	
Distribute the workbook.	Students read "To the Student" on page vii of the text.
Distribute the course syllabus, review each sessions content.	Ask for questions and concerns about the course or schedule.
Place the responsibility to learn on the students	Review the comments at the bottom of the syllabus.
Distribute the pre-course quiz. Explain that this is the same quiz that will be given at the end of the course.	

REGISTRATION FORM
SKILL ENHANCEMENT TRAINING PROGRAM

Northeast Metro Technical College
in cooperation with
Minnesota Teamsters Service Bureau

Course: ______________________________

1. Start Date ______________ 2. End Date ______________

3. Location: Northeast Metro Technical College ______________
Other ____

4. Name ____
Last First Middle Initial

5. Address ____

____
City State Zip

6. Telephone: Home ( ) __________ Work ( ) __________

7. Employer ______________________________ Member of Teamster Local # ______

8. Current Job Title ____

9. Sex ___Male ___Female

10. Age category:
- ___ 20-25
- ___ 26-30
- ___ 31-35
- ___ 36-45
- ___ 46+

11. Ethnic Origin:
- ___ White
- ___ Black
- ___ Native American
- ___ Asian

12. What is your primary spoken language? ___ English ___ Spanish ___ Other

13. Do you have a high school diploma? ___Yes ___No GED? ___Yes ___No

14. Have you had any post high school training? ___Yes ___No
If yes, what type?

TYPE	DEGREE/MAJOR
___ Community College	______________________________
___ Technical College	______________________________
___ Four-Year College	______________________________
___ Military	______________________________
___ Other:	______________________________

15. How did you find out about the course? ______________________________

Northeast Metro Technical College complies with state and federal laws prohibiting discrimination against students because of age, race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance or disability.

SPREAD SHEET SOFTWARE using PC-CALC

Course Syllabus

Text: Application Software for the IBM PC
Dates: May 21 & 28 and JUNE 4

21 May PRE COURSE QUIZ

Starting the PC-CALC program

The Screen
- Data Entry Area
- The Pointer
- Pointer Movement Keys
- Status Line
- Edit Line
- Message Line

Entering Data

Title Locking

Printing Data - Print Format Options

Using LOAD and SAVE functions

28 May REVIEW OF LAST WEEK

Worksheet Enhancements

Copying cell information

Using the RANGE command

Using WHAT IF Analysis

4 June REVIEW OF LAST 2 WEEKS

Keystroke Macros

Developing Graphs as output

Using a split screen

Wrap up - Final Exam

PC-CALC+

PRE / POST QUIZ Name ____________________

1. What is entered to start the PC-CALC program?

2. What is another name for the data entry area of the screen?

3. What keystroke brings up the HELP function?

4. What are the three basic types of data that can be entered into a cell?

5. What is the difference between a FORMULA and a FUNCTION?

FORMULA ____________________

FUNCTION ____________________

6. What does the key combination Ctrl / G allow you to do?

7. What does a LOAD command accomplish?

8. What does the SAVE command accomplish?

9. What command is used to copy data from one cell to another?

10. What does the ZAP function do:

____

11. Describe how to see a preview of the report to be printed? In other words, what keystrokes are needed to see a preview?

____

____

12. What are the requirements for naming a file that is to be saved?

____

____

13. What does the function AVG(C2:C8) provide?

14. How can you adjust the width of a column?

____

____

15. What function would the keystrokes / B M perform?

____

16. What keystrokes will allow you to define a Graph for a spreadsheet?

____

17. What function would the keystrokes / S H perform?

ELECTRONIC SPREADSHEETS using PCCALC

Instructor Guide

OBJECTIVE: Access and start PC-CALC, the Spread Sheet program.

REFERENCE: Application Software for the IBM PC

HANDOUT: Worksheet 1 - page 1 & 2

TIMING: 20 -30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Take a few minutes to introduce the spreadsheet concept - many of the students may have no idea what a spreadsheet is.	Either use your own explanation or refer to the text. Pages 125 - 128
The intention here - again is to access the PCCALC program in the PC-CALC directory.	There will have to be a review here. Even though the access is very similar to the PCTYPE program, the process should be reviewed.

PC-CALC WORKSHEET 1

1. Start the PC-CALC program. You will be doing this from the DOS prompt and the DOS Shell.

   Record the steps below to do that.

   From DOS Prompt: ______________________________

   ____

   ____

   From the DOS Shell: ______________________________

   ____

   ____

   Name of the program to run: ______________________________

   Note: When the application program (PCC.EXE) is first loaded into memory, the spreadsheet form appears and the Copyright notice is at the bottom of the screen.

2. At the "Copyright 1987" screen, press <Enter>.

3. The data entry area is comprised of _______ and ______________.

4. At each intersection, there is a ___________.

5. The "Pointer" is the hi-lited "Block" that moves from cell to cell as you press the ______________________________.

6. The rows are numbered from 1 through ________.

7. The columns are lettered from A through ________.

8. Using the figures, in 6 & 7 above, what is the cell number in the lower right cell location? ____________________

9. Position your pointer at the cell indicated in item 8 above. Try the following keys and describe what they do:

↑ ____

↓ ____

→ ____

← ____

PgUp ____

PgDn ____

Alt/Home ____

Ctl/Home ____

10. Position the pointer in cell **M100**, what is the key combination that will place the pointer back to cell **A1** ?

____

11. Describe the types of data that can be entered into cells.

Values ____

Formulas ____

Functions ____

Text ____

ELECTRONIC SPREADSHEETS using PCCALC

Instructor Guide

OBJECTIVE:	Load spreadsheet data using a student data diskette and describe the spreadsheet components used with the PCCALC program.
REFERENCE:	Application Software for the IBM PC
HANDOUT:	Worksheet 1 - page 2 & 3
TIMING:	45 - 60 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Introduce the PCCALC screen	
Discuss the different pieces of the screen - rows / columns cells status line data entry area pointer edit line message line	
Have them load a spreadsheet from the student diskette	
Let them experiment with the spreadsheet.	
List items to try: moving pointer changing values review menus discuss HELP screens	Be sure to give them time guidance here. This may be the first time they have dealt with a spreadsheet.

12. The STATUS LINE at the top of the screen shows 3 items. List and describe them below.

__________ ______________________________

__________ ______________________________

__________ ______________________________

13. The EDIT LINE is used for ______________________________

____

14. The MESSAGE LINE has 5 particular keys that appear at the bottom of the screen. Define each of them below.

/=Menu Options ______________________________

F1=Context Help ______________________________

F2=General Help ______________________________

F3=Edit ______________________________

F10=Recalc All ______________________________

15. After selecting a cell by placing the pointer on it, what key can be pressed to edit a cell once it is selected. __________

ELECTRONIC SPREADSHEETS using PCCALC

Instructor Guide

OBJECTIVE: Enter data, text and formulas into cells to accomplish a simple spreadsheet application.

REFERENCE: Application Software for the IBM PC

HANDOUT: Worksheet 1 - page 2 - 8
Jones Family Budget

TIMING: 1.5 - 2 hours

OUTLINE:

TOPIC	TIPS & HINTS
Now that they have seen a spreadsheet and tried a few things, have them build one.	
Have them build a budget sheet similar to the "Jones Family Budget"	Build this with them - describe each detail as you build each piece of the spreadsheet. This will get them familiar with the spreadsheet components.

Wednesday May 20. 1992 21:56:18

Jones Family Budget - 1st Qtr. 1992

	Jan	Feb	Mar	TOTAL
Housing	600.00	600.00	600.00	1800.00
Car	289.00	289.00	289.00	867.00
N.S.P	66.00	69.00	58.00	193.00
Minnegasco	48.00	48.00	48.00	144.00
City Utilities			110.00	110.00
Sears	12.00	22.00	18.00	52.00
Visa	50.00	50.00	35.00	135.00
Insurance	150.00		110.00	260.00
Food	380.00	350.00	365.00	1095.00
TOTAL	1595.00	1428.00	1633.00	4656.00

16. Enter the data as indicated in the sample spread sheet of the **"Jones Family Budget - 1st Qtr. 1992"**

   a. Enter the title of the spreadsheet starting in cell B1.

   b. Enter the months in the respective cells and TOTAL in cell F3. List the steps required to center the titles in the cells B3 thru F3.

   c. Enter the titles in cells A5 thru A17. List the key strokes required to make column A wider to accommodate the text. (Hint: City Utilities has 14 characters.)

   d. Enter the values as required for cells B5 thru B13. You only need to enter the dollar amount - not the ".00" for cents.

   e. How can the data in B5 be copied to C5 and D5.

   f. Enter a FORMULA in cell F5 to add the values in cells B5, C5 and D5. Write the FORMULA below:

   g. Copy the formula in F5 to cells F6, F7, thru to F17. List the steps required to do that.

h. Enter a FUNCTION in cell B17 to add the values in cells B5 thru B13. Write the FUNCTION below:

____

i. Copy the function in cell B17 to cells C17, D17 & F17. List the steps required to do that.

____

____

____

____

j. Change the March - City Utilities amount to $100.00 and observe the changes. What cells were affected?

____

Try other modifications as you wish and observe changes.

k. Use the title locking function to protect the title of the spread sheet. List the steps required to do that.

____

____

l. Save the file to your diskette and name it JONES. What key strokes are needed to do this?

____

m. What keystrokes will save your file then quit?

____

17. Enter a function in cell G13 to display the average of the monthly food expense. List the function required below.

18. Enter the label "AVERAGE" in cell G3. This column will display the average of each of the monthly expense items.

Why is this label not centered like the others?

19. Center the AVERAGE column of the worksheet. List the keystrokes below that will do that.

20. Copy the function in cell G13 to the cells above it. What range of cells does that include?

21. List the keystrokes required to copy cell G13 into G5 - G12.

22. Insert three columns so that the months of April May and June can be added to the worksheet. List the keystrokes below that will do that.

23. Insert the data as required for the months of April thru June. Include the column headings and dollar amounts.

(Hint: Use the copy function to copy the entire column. then make individual cell changes as required.)

Jones Family Budget - April, May, June

	APR	MAY	JUN
Housing	600	600	600
Car	289	289	289
N.S.P.	54	50	45
Minnegasco	48	48	48
Utilities			100
Sears	22	14	10
Visa	38	60	55
Insurance			150
Food	380	330	395

24. When all values have been added for each month, check the year-end totals. Why aren't they accurate?

____

____

25. Are the amounts in the AVERAGE column accurate? __________

Why not?

____

26. Make the appropriate entries to fix the problems identified in 24 and 25 above. Remember to use a COPY function where ever possible. List what changes were required.

____

____

27. If not already done, add or copy the function for the monthly totals E17 thru G17. List the keystrokes required below

____

28. Right justify the titles in cells A5 thru A17. List the keystrokes below that will do that.

____

____

29. Place a "$" on all of the TOTALs at the bottom of the worksheet. List the keystrokes below that will do that.

____

____

30. Place a "$" on all of the TOTAL amounts and the AVERAGE amounts at the right side of the worksheet. List the keystrokes below that will do that.

____

____

31. Adding the $ to the columns made the numbers harder to read. Change all column widths to 11 instead of 9. List the keystrokes below that will do that.

____

____

32. What is the Grand TOTAL of the worksheet? (cell I17) __________

33. WHAT would the Grand TOTAL be IF the Jones' Housing cost was only $300 per month - instead of $600? Change the amount in cell B5 and copy that change to cells C5 thru G5. List the keystrokes below that will do that.

____

____

34. What is the Grand TOTAL after the changes? __________

35. In cell B19, enter the text "Largest Visa payment"

36. In cell D19, enter a function to indicate the largest Visa payment. List the function below that will do that.

____

37. In cell B21, enter the text "Smallest Sears payment"

36. In cell D21, enter a function to indicate the smallest Sears payment. List the function below that will do that.

____

37. Move the title "Jones Family Budget - 1st Qtr. 1992" to cell C1 and change it to: "Jones Family Budget - 1st Half 1992". List the keystrokes below that will do that.

____

____

ELECTRONIC SPREADSHEETS using PCCALC

Instructor Guide

OBJECTIVE: Demonstrate the copying of cell information from one cell to another.

REFERENCE: Application Software for the IBM PC

HANDOUT: Worksheet 1 - page 2 - 8
Jones Family Budget

TIMING:

OUTLINE:

TOPIC	TIPS & HINTS
This segment should be done in the same time frame as entering data for the Jones Family Budget.	
Review the steps required to copy cell information - point out that it doesn't matter if the cell info is text or a formula.	In demonstrating the copy cell feature, start out with a single cell and then show the possibility of doing multiple cells.

ELECTRONIC SPREADSHEETS using PCCALC

Instructor Guide

OBJECTIVE: Enter the appropriate keystrokes to print the spreadsheet data.

REFERENCE: Application Software for the IBM PC

HANDOUT: N / A

TIMING: 10 - 15 minutes

OUTLINE:

TOPIC	TIPS & HINTS
There is no particular handout for this segment. The print is done from the menu and is rather straight forward.	The printers will probably have to be shared. You will have to move tha cable from one computer to the next.

ELECTRONIC SPREADSHEETS using PCCALC

Instructor Guide

OBJECTIVE: Enter the appropriate keystrokes to create a Keystroke Macro.

REFERENCE: Application Software for the IBM PC

HANDOUT: PC-CALC - MACROS

TIMING: 20 - 30 minutes

OUTLINE:

	TOPIC	TIPS & HINTS
	Introduce Keystroke Macros much like the intro done in the PCTYPE segment.	Even though the students have been introduced to Macros in PCTYPE, they will have to be reminded.
	Discuss the uses of a Macro in a spreadsheet. One use is to create the month column labels using a Macro.	
	This way, the month headings can be entered using one keystroke. This of course assumes that you will want the same month headings used for each worksheet.	
	For the sample Macro, have the students create a Macro that will delete all cells in one row of the worksheet.	
Procedure	1. Place pointer in the left column	Have the students build the Macro as you demo and show them how.
	2. Start Macro (Alt/Y)	
	3. Clear/delete all characters in cell	Give them time to test and rebuild it as required.
	4. Move pointer one cell to the right	
	5. Repeat 3 & 4 to clear all cells	
	6. End Macro (Alt/Y)	

PC-CALC - MACROS

A macro is ____

____

For this part of the exercise you will identify the keystrokes required to create a macro. The macro we want to create will clear all of the cells in one row of a worksheet.

Place the pointer in cell A5

List the keystrokes required in the steps below to create a macro that would do the following:

a - start creating a macro __________

b - clear or erase the info in cell A5 __________

c - move the pointer one cell to the right __________

d - clear the cell __________

e - (repeat step 2 & 3 until all cells are empty)

f - return the pointer to column A __________

g - move the pointer down one row __________

h - end the macro __________

i - key used to start macro __________

j - description of macro __________

Execute the macro by pressing ALT / ______

ELECTRONIC SPREADSHEETS using PCCALC

Instructor Guide

OBJECTIVE: Develop a graph as output using the spreadsheet data for home finances.

REFERENCE: Application Software for the IBM PC

HANDOUT: PC-CALC - CHARTS and GRAPHS

TIMING: 1 - 1.5 hours

OUTLINE:

TOPIC	TIPS & HINTS
Review the graphing process either via the book or with your own techniques.	For this overview, discuss the types of graphs and their components. Don't assume that the students know anything about charts and graphs.
This program allows one (1) variable to be plotted per chart.	
Follow the procedure in the handout to build the chart.	
Have students build the chart as you do during the demo session.	Give them pleanty of time to experiment with the chart.

PC-CALC - CHARTS and GRAPHS

This next portion of the worksheet deals with creating a chart from the data. PC-CALC gives you the capability of charting one value or variable per chart. For this exercise, you will chart the information for the 6 months of expenses for the NSP catagory.

Follow the procedure below to do this.

1. Load the spreadsheet that shows the 6 month budget for the Jones family.

2. When you build a chart or graph, you will need the following information. Fill in the blanks below to use when building a chart.

   TITLE of graph: ____________________

   category HEADING: ____________________

   category labels: ____________________

   values HEADING: ____________________

   row for DOLLARS: ____________________

   Type of graph: ____________________

   (Horizontal Bar / Line / Pie / Scatter / Verticle Bar)

   Save definition: ____________________

   path to save graph: ____________________

   name of file: ____________________

3. Using the information above, build a vertical bar chart. Enter the keystrokes required in the space below.

   ____

   ____

   ____

   ____

4. At the chart screen - what do the following keys do?

S ______________________________

L ______________________________

H ______________________________

P ______________________________

5. Try the various types of charts available.

6. What is the difference between a regression line "R" and a number used for a "smoothed average" ?

____

7. Press <ESC> and go back to the main spreadsheet. Press <Enter> once to access the / for the menu.

8. Now - view the chart again without building it. To do this, select: (C)hange/run saved graphs from the Print/Graph menu.

Why is this table empty?

____

9. Press <ESC> to go back to main menu and rebuild the chart - this time save the definition information in table.

10. View the chart again, then press <ESC> and go back to the main spreadsheet. Press <Enter> once to access the / for the menu.

11. This time - when you select (C)hange/run saved graphs from the Print/Graph menu, there should be chert information in the GRAPH DATA TABLE.

NOTE: At this screen, you have the ability to change any of the information in the table.

12. When finished changing information - press / to access the Table Options menu. Press "E" to execute (view) the file.

Save the information to the same file name - and the chart appears.

ELECTRONIC SPREADSHEETS using PCCALC

Instructor Guide

OBJECTIVE: Save spreadsheet data using a student data diskette.

REFERENCE: Application Software for the IBM PC

HANDOUT: N / A

TIMING: 10 - 15 minutes

OUTLINE:

TOPIC	TIPS & HINTS
There is no handout for this segment. The SAVE is found in the menu (/).	
Point out that the save is different than the save in PCTYPE.	Explain the differences in various application programs.
	The students - once exposed to a "SAVE" such as in PCTYPE tend to try the same steps in saving a PCCALC file.
Select MENU to save the file.	
After saving - go to DOS to show them that the file was save with a .PCC as an extension for the file name.	

PC-CALC+

PRE / POST QUIZ Name ______________________

1. What is entered to start the PC-CALC program?

____

2. What is another name for the data entry area of the screen?

____

3. What keystroke brings up the HELP function?

____

4. What are the three basic types of data that can be entered into a cell?

______________ ______________ ______________

5. What is the difference between a FORMULA and a FUNCTION?

FORMULA ______________________________________

FUNCTION ______________________________________

6. What does the key combination Ctrl / G allow you to do?

____

7. What does a LOAD command accomplish?

____

8. What does the SAVE command accomplish?

____

9. What command is used to copy data from one cell to another?

____

COURSE EVALUATION
SKILL ENHANCEMENT TRAINING PROGRAM

COURSE ______________________ DATE COMPLETED _____

INSTRUCTOR: ____________________

DIRECTIONS: Circle the number on the right to indicate how satisfied you are with the following aspects of the course you just completed. (5 = very satisfied; 1 = not satisfied)

	Not Satisfied				Very Satisfied
1. Course Goals (specific, clearly communicated)	1	2	3	4	5
2. Content, Subject Matter (organized, appropriate for course goals)	1	2	3	4	5
3. Written Materials and Resources (up-to-date, easy to read, and/or follow)	1	2	3	4	5
4. Support from instructor (quick, courteous, helpful)	1	2	3	4	5

What did you like about the course? ______________________

____

What didn't you like about the course? ______________________

____

What job related topics would you like addressed in future training sessions?

____

___ I would be interested in a follow-on group of computer classes.

___ A weekday evening would be most convenient. ___AM ___PM

___Mon ___Tues ___Wed ___Thurs ___Fri

___ Saturday morning classes would be most convenient.

Please jot down any other comments you may have below.

3/92

COURSE EVALUATION
SKILL ENHANCEMENT TRAINING PROGRAM

COURSE ________________________________ DATE COMPLETED ______

INSTRUCTOR: ______________________

DIRECTIONS: Circle the number on the right to indicate how satisfied you are with the following aspects of the course you just completed. (5 = very satisfied; 1 = not satisfied)

	Not Satisfied			Very Satisfied	
1. Course Goals (specific, clearly communicated)	1	2	3	4	5
2. Content, Subject Matter (organized, appropriate for course goals)	1	2	3	4	5
3. Written Materials and Resources (up-to-date, easy to read, and/or follow)	1	2	3	4	5
4. Support from instructor (quick, courteous, helpful)	1	2	3	4	5

What did you like about the course? ______________________________

____

What didn't you like about the course? ______________________________

____

What job related topics would you like addressed in future training sessions?

____

___ I would be interested in a follow-on group of computer classes.

___ A weekday evening would be most convenient. ___AM ___PM

___Mon ___Tues ___Wed ___Thurs ___Fri

___ Saturday morning classes would be most convenient.

Please jot down any other comments you may have below.

3/92

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

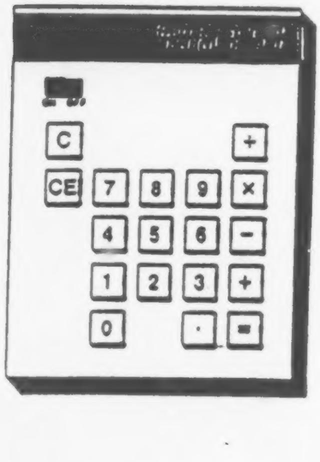
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

WORKPLACE LITERACY PROJECT

CALCULATOR MATH

WORKPLACE LITERACY RESOURCE CENTER
1-800-832-4916

MINNESOTA TEAMSTERS SERVICE BUREAU
NORTHEAST METRO TECHNICAL COLLEGE



WORKPLACE LITERACY PROJECT

COMMERCIAL DRIVERS LICENSE

JEAN C. DUNN
Executive Director
Minnesota Teamsters Service Bureau

DR. PAUL BORANIAN
Project Director
Minnesota Teamsters Service Bureau

DR. BILL WARNER
President
Northeast Metro Technical College

JON A. HARBACK
Project Coordinator
Northeast Metro Technical College

Special thanks to Harold Yates, President of the Minnesota Teamsters Joint Council #32 for facilitating the involvement of a number of trucking companies in the Minnesota Teamsters Service Bureau Workplace Literacy Project

1992

CALCULATOR MATH

Course Description

The CALCULATOR-MATH course is designed to provide an opportunity to review math skills and become more familiar with essential calculator operations. Use of the calculator will be emphasized throughout the course.

The six sessions are structured as indicated below and include the topics described.

1. Students will read, write and compare decimal numbers, decimal fractions, and proper fractions. Reading and writing percentages is also practiced.

2. Students will practice adding, subtracting, multiplying and dividing decimal numbers. Use of estimating and rounding will be applied.

3. Addition, subtraction, multiplication and division of fractions and mixed numbers will be practiced. Students will also estimate and solve problems using mixed numbers and fractions.

4. The concept of finding parts of a whole are practiced. Students will work with percentages and interest rates, and will interchange percents, decimals and fractions.

5. Using measurements - both English and metric units is covered. Problems related to area and volume will be solved. Students will also practice estimating distances and weights.

6. Analyzing data using charts and graphs is the main topic. Other skills learned are interpolating, extrapolating, determining the median and computing a ratio.

CALCULATOR MATH

Performance Objectives

OBJECTIVES:

Upon completion of this course, the student will be able to:

Read, write and compare decimal numbers, decimal fractions, proper fractions and percentages.

Add, subtract, multiply and divide decimal numbers.

Use estimating and rounding as applied to decimal numbers.

Add, subtract, multiply and divide fractions and mixed numbers.

Work with percentages and interest rates.

Convert numbers between percents, decimals and fractions.

Estimating distances and weights using English and metric measurements.

Use English and metric measurements relating to area and volume.

Analyze data using charts and graphs.

CRITERIA:

Performance will be satisfactory if the student can achieve a score of 80% or better on an appropriate exam.

CALCULATOR MATH

Course Syllabus

Text:	MATH SKILLS THAT WORK
Dates:	Xxxxx XX, XX, XX Xxxxx XX, XX, XX

XX Xxxxx	NUMBERS SMALLER THAN ONE
XX XXXXX	DECIMALS
XX Xxxxx	FRACTIONS
XX Xxxxx	PERCENTS
XX Xxxxx	TOPICS IN MEASUREMENT
XX Xxxxx	DATA ANALYSIS

SUGGESTIONS:

Take the responsibility to learn:

- Ask questions - the only dumb question is the one that isn't asked.
- Study the text, read the material and complete the Workbook exercises.

CALCULATOR MATH

Instructor Guide

This document is a Guide to be used by the instructor in teaching the CALCULATOR MATH Course. It also provides a means for updating the course. The TIPS & HINTS column in the outline segment of each section contains space for adding comments each time the course is run. This provides a way to pass on ideas and insight to other instructors that may teach the course.

The Instructor Guide is structured in sequence with the objectives and with the text MATH SKILLS THAT WORK. It is organized into nine (9) sections, each covering one objective and a portion of the text. Note that there are 9 objectives to be covered in six sessions.

The reference text for the course, as well as being the Student Workbook, is MATH SKILLS THAT WORK. The text/workbook has six Units and corresponds to the six class sessions. Supplemental handouts are included to provide extra skill practice in addition to the exercises in the workbook.

The workbook is designed to be self-paced. Students work independently on each portion of the workbook, within a time frame determined by the instructor. The OUTLINE portion of the Instructor Guide provides direction and timing for each session.

The instructor should facilitate the sequence and timing of the session and serve as an advisor should there be any questions.

This guide is divided into ten (10) sections, one objective per section. Each section is divided into the following segments.

OBJECTIVE:	Performance objective listed - 1 through 10.
REFERENCE:	Pages assigned from MATH SKILLS THAT WORK.
HANDOUT:	Supplemental handout(s) to be used in lesson.
TIMING:	The approximate time required to accomplish the objective. These times will vary, a range of time for each objective is indicated.
OUTLINE:	Provides the direction and timing for each objective. The outline sheet is in a split-sheet format, with the TOPICS listed in the left column and the TIPS & HINTS in the right column. These TIPS & HINTS are comments relative to this lesson that may be helpful to you the instructor. This portion of the guide should be updated each time the session is run. These notes are a great help to the instructor and will assist in making the guide most useful.

CALCULATOR MATH

Instructor Guide

OBJECTIVE: Introductions: Self, Students, Course and Text

REFERENCE: MATH SKILLS THAT WORK

HANDOUT: Registration forms
Course Syllabus

TIMING: 30 minutes

OUTLINE:

TOPIC	TIPS & HINTS
Registration:	
Distribute registration forms as required.	
Introductions:	
Introduce yourself and have students introduce themselves	Give them some guidance to help them - such as: NAME PLACE OF WORK MATH BACKGROUND WHAT THEIR MATH NEED IS WHY THEY ARE TAKING MATH
Introduce course:	
Distribute the workbook.	Students read "To the Student" on page vii of the text.
Distribute the course syllabus, review each sessions content.	Ask for questions and concerns about the course or schedule.
Place the responsibility to learn on the students	Review the comments at the bottom of the syllabus.

CALCULATOR MATH

Instructor Guide

OBJECTIVE: Read, write and compare decimal numbers, decimal fractions, proper fractions and percentages.

REFERENCE: MATH SKILLS THAT WORK
Unit One - Numbers Smaller Than One

HANDOUT:

TIMING: 2 - 2.5 hours

OUTLINE:

TOPIC	TIPS & HINTS
Numbers smaller than one - pages 1-3	
Decimal Fractions - pages 4-5	
Writing Zero as a place holder - page 6	
Decimal Fractions & Mixed Decimals - pages 7-9	
Fractions, Writing and Simplifying - page 10-12	
Fractions, Raising to Higher Terms, Comparing - 13-17	
Mixed Numbers & Improper Fractions - 18-19	
Percentages - 20-25	
Estimating - 28-29	
FOCUS ON CALCULATORS	

CALCULATOR MATH

Instructor Guide

OBJECTIVE: Add, subtract, multiply and divide decimal numbers.

REFERENCE: MATH SKILLS THAT WORK
Unit Two - Decimals

HANDOUT:

TIMING: 2.5 2 hours

OUTLINE:

TOPIC	TIPS & HINTS
Decimals - introduction - pages 32-33	
Estimating and rounding - pages 34-39	
FOCUS ON CALCULATORS 40-43 Add, Subtract Multiply & Divide	
Adding & Subtracting Decimals - pages 44-47	
Multiplying Decimals - pages 50-54	
Dividing Decimals pages 56-67	
ON THE JOB - pages 55, 58, 60, 62	It may be a good idea for continuity if the add, subtract, multiply and divide are done together - then do the ON THE JOB and the IN YOUR LIFE exercises separately.
IN YOUR LIFE - pages 61, 66	
SKILL REVIEW - page 68	

CALCULATOR MATH

Instructor Guide

OBJECTIVE: Use estimating and rounding as applied to decimal ers.

REFERENCE: MATH SKILLS THAT WORK
Unit Three - Fractions

HANDOUT:

TIMING: 1 - 1.5 hour

OUTLINE:

TOPIC	TIPS & HINTS
Introduction pages 70-71	
Estimating with Fractions - pages 72-75	
FOCUS ON CALCULATORS 76 - 77 Mixed Numbers	

CALCULATOR MATH

Instructor Guide

OBJECTIVE:	Add, subtract, multiply and divide fractions and mixed numbers.
REFERENCE:	MATH SKILLS THAT WORK Unit Three - Fractions
HANDOUT:	
TIMING:	2 - 2.5 hours

OUTLINE:

TOPIC	TIPS & HINTS
Adding & subtracting Like Fractions pages 78-84	
Adding & subtracting Unlike Fractions pages 86-88	
Adding & subtracting Mixed Numbers pages 90-91	
Multiplying Fractions & Mixed Numbers pages 94-97	
Dividing Fractions & Mixed Numbers pages 100-103	
ON THE JOB - pages 89, 93, 99	Again - do the ON THE JOB and the IN YOUR LIFE exercises separately.
IN YOUR LIFE - pages 85, 92, 98	
SKILL REVIEW - page 104	

CALCULATOR MATH

Instructor Guide

OBJECTIVE: Work with percentages and interest rates.

REFERENCE: MATH SKILLS THAT WORK
Unit Four - Percents

HANDOUT:

TIMING: 2 - 1.5 Hours

OUTLINE:

TOPIC	TIPS & HINTS
Introduction pages 106-107	
Percent problems and the Percent Circle pages 108-111	
FOCUS ON CALCULATORS 112-117	This is a more extensive exercise with the calculator. Verify students understanding of each section.

CALCULATOR MATH

Instructor Guide

OBJECTIVE: Convert numbers between percents, decimals and fractions.

REFERENCE: MATH SKILLS THAT WORK
Unit Four - Percents

HANDOUT:

TIMING: 2 - 2.5 hours

OUTLINE:

TOPIC	TIPS & HINTS
Changing Percents to Decimals and Fractions pages 118-121	
ON THE JOB - page 119	This should be done here, immediately following the related exercises
Finding the Part, Percent and the Whole - pages 122-127	
ON THE JOB - page 128	Likewise, do these immediately following the related exercises
IN YOUR LIFE - page 129	
Understanding Simple Interest	
ON THE JOB & IN YOUR LIFE pages 132-137	
SKILL REVIEW - page 138	

CALCULATOR MATH

Instructor Guide

OBJECTIVE: Estimating distances and weights using English and metric measurements.

REFERENCE: MATH SKILLS THAT WORK
Unit Five - Topics in Measurement

HANDOUT:

TIMING: 1.5 - 2 hours

OUTLINE:

TOPIC	TIPS & HINTS
Introducing Measurement - pages 142-143	
IN YOUR LIFE - page 146	
Measuring Centimeters - page 147	
ON THE JOB - page 148	
IN YOUR LIFE - page 149	
ON THE JOB - page 150-151	
IN YOUR LIFE - page 152	
Reading a Weather Thermometer - page 153	

CALCULATOR MATH

Instructor Guide

OBJECTIVE: Use English and metric measurements relating to area and volume.

REFERENCE: MATH SKILLS THAT WORK
Unit Five - Topics in Measurement

HANDOUT:

TIMING: 1 hour

OUTLINE:

TOPIC	TIPS & HINTS
Intro to Area page 156	
IN YOUR LIFE - page 157	
Intro to Volume - page 158	
IN YOUR LIFE - page 159	
SKILL REVIEW - page 160	

CALCULATOR MATH

Instructor Guide

OBJECTIVE: Analyze data using charts and graphs.

REFERENCE: MATH SKILLS THAT WORK
Unit Six - Data Analysis

HANDOUT:

TIMING: 2.5 - 3 hours

OUTLINE:

TOPIC	TIPS & HINTS
Introduction to Charts and Graphs pgs 160-161	
Numerical Data Interpolation & Extrapolation	
ON THE JOB - page 164	
Language of Data Analysis - page 165-168	
Reading a Bar Graph - pg 168	
ON THE JOB - page 169	
Reading a Line Graph - pg 170	
IN YOUR LIFE - page 171	
Reading a Circle Graph - page 72	
IN YOUR LIFE - page 173	
Using Data Sources & Drawing Conclusions - 174-177	
Drawing a Graph - page 17	
ON THE JOB - page 179	
POST TEST - page 180	

CALCULATOR MATH

Instructor Guide

OBJECTIVE:

REFERENCE:

HANDOUT:

TIMING:

OUTLINE:

TOPIC	TIPS & HINTS

COURSE EVALUATION
SKILL ENHANCEMENT TRAINING PROGRAM

COURSE ______________________________ DATE COMPLETED ______

INSTRUCTOR: ______________________

DIRECTIONS: Circle the number on the right to indicate how satisfied you are with the following aspects of the course you just completed. (5 = very satisfied; 1 = not satisfied)

	Not Satisfied				Very Satisfied
1. Course Goals (specific, clearly communicated)	1	2	3	4	5
2. Content, Subject Matter (organized, appropriate for course goals)	1	2	3	4	5
3. Written Materials and Resources (up-to-date, easy to read, and/or follow)	1	2	3	4	5
4. Support from instructor (quick, courteous, helpful)	1	2	3	4	5

What did you like about the course? ______________________________

____

What didn't you like about the course? ______________________________

____

What job related topics would you like addressed in future training sessions?

____

___ I would be interested in a follow-on group of computer classes.

___ A weekday evening would be most convenient. ___AM ___PM

___Mon ___Tues ___Wed ___Thurs ___Fri

___ Saturday morning classes would be most convenient.

Please jot down any other comments you may have below.

3/92